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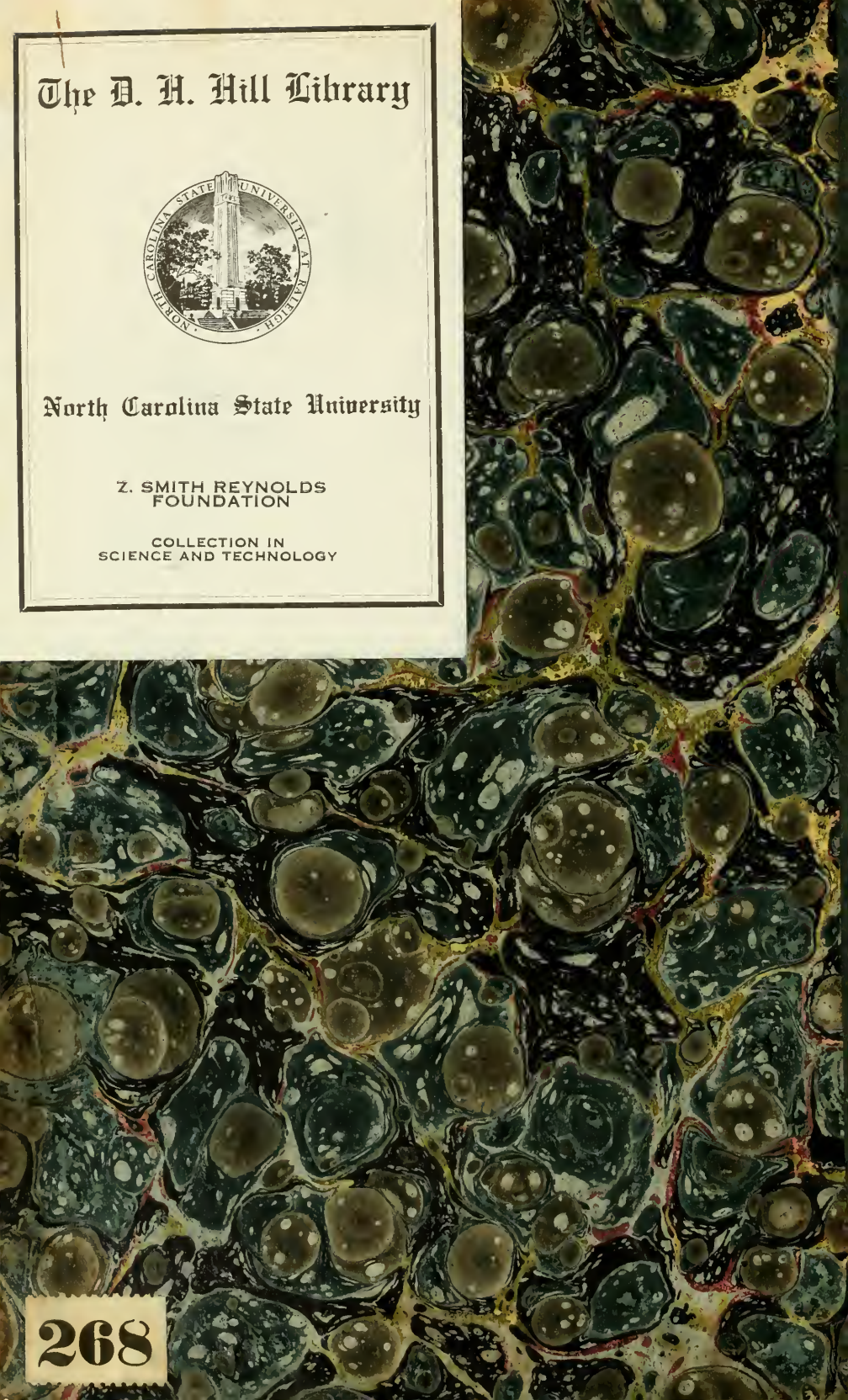

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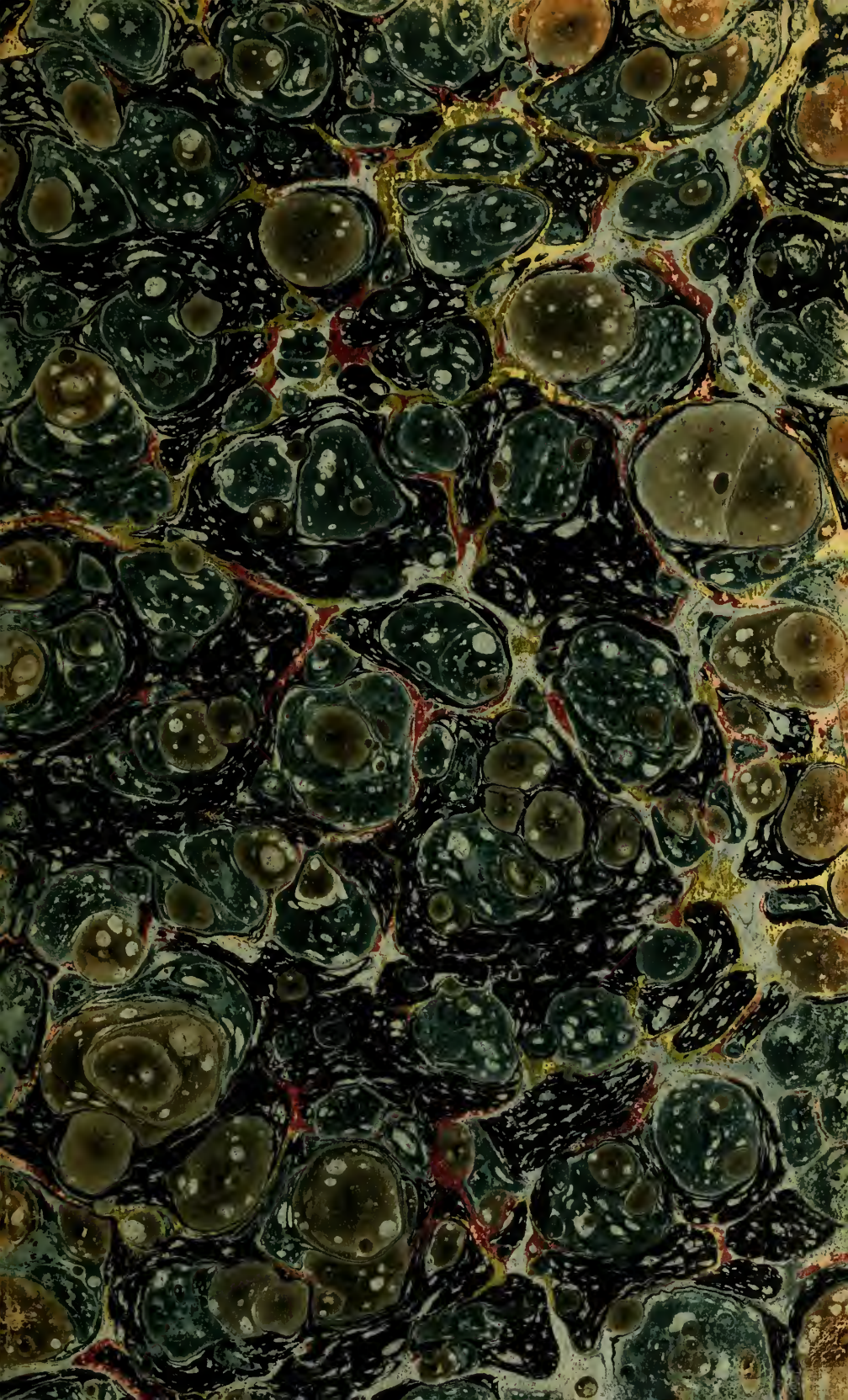

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A

TREATISE

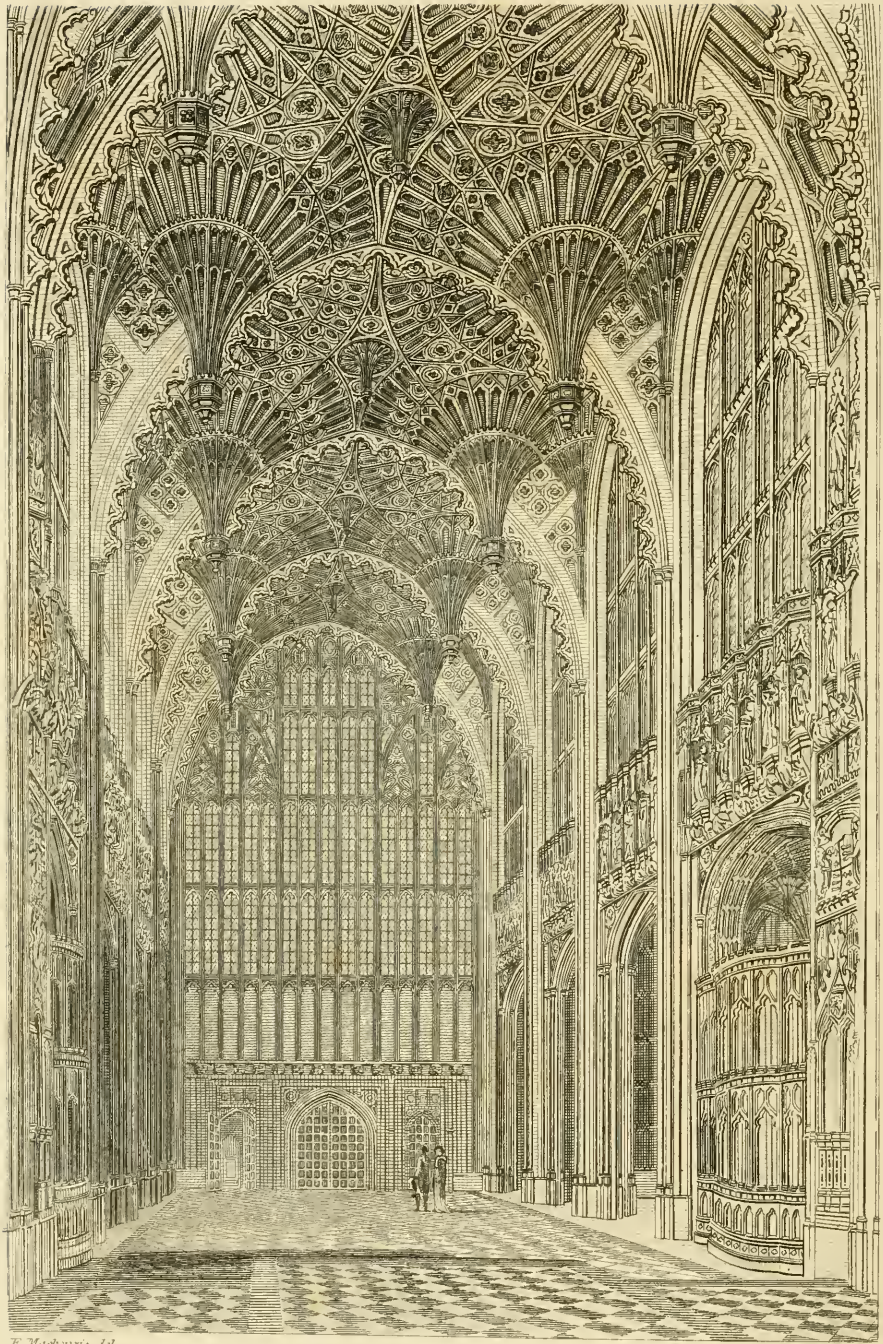
ON THE

ECCLESIASTICAL ARCHITECTURE

OF

ENGLAND,

DURING THE MIDDLE AGES.



F. Mackenzie del. Etchd by W. Woolnoth

Interior View, looking Westward, of

HENRY VII.TES CHAPEL, Westminster. – Built A.D. 1502.

A

TREATISE

ON THE

ECCLESIASTICAL ARCHITECTURE

OF

ENGLAND,

DURING THE MIDDLE AGES,

WITH TEN ILLUSTRATIVE PLATES.

BY THE

REV. JOHN MILNER, D.D. F.S.A. &c.

" Certe solet ecclesiarum cultus augustior quaslibet brutas mentes ad " orandum illicere, quamlibet cervicositatem ad supplicandum et inflec- " tere." *Gul. Malmesbur. De Antiq. Glaston. Eccl. XV. Auct.*

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1811.

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TO

HIS GRACE,

THE DUKE OF NORFOLK,

HEREDITARY EARL MARSHAL OF ENGLAND,

PRESIDENT OF THE SOCIETY FOR THE ENCOURAGEMENT OF ARTS, &c.

THIS TREATISE

On an Ancient Art,

WHICH OWES ITS RISE AND PROGRESS TO ENGLAND,

IN GRATITUDE,

FOR PROTECTION FROM OBLOQUY,

IS RESPECTFULLY INSCRIBED

BY

THE AUTHOR.

PREFACE.

The subject of the present Treatise has given rise to so much and such earnest debate among the learned and ingenious, and has occasioned so many publications, and such a variety of systems concerning it, as cannot fail of exciting the wonder of persons insensible to the grandeur and beauty of Pointed Architecture, and unacquainted with the merit of its invention.

Amongst other writers on this subject, is the present author, in the

Second Volume of his HISTORY of WINCHESTER, the first edition of which was published about a dozen years ago; when much attention was paid to the system there laid down. The following are the outlines of it: *first*, that the whole style of Pointed Architecture, with all its members and embellishments of cluster-columns, converging groins, flying buttresses, tracery, tabernacles, crockets, finials, cusps, orbs, pinnacles, and spires, grew, by degrees, out of the simple pointed arch, between the latter end of the 12th and the early part of the 14th centuries; *secondly*, that the pointed arch itself was discovered by observing the happy effect of those intersecting semicircular arches with which the architects of the latter end

of the 11th and the beginning of the 12th centuries were accustomed to ornament all their principal ecclesiastical edifices; and *thirdly*, that we are chiefly indebted for both these discoveries, that is to say, both for the rise and the progress of Pointed Architecture, to our own ancestors, the Anglo-Normans, and the English.

The system here traced out, which the author first took up and advanced with a considerable degree of diffidence, has gained a much stronger hold upon his mind, in consequence of a more strict examination of historical documents and existing monuments of Pointed Architecture, and, in some degree, by more attentively weighing the arguments which have been advanced by dif-

ferent writers against this system. Nevertheless, occupied as the author has been for a long time past with other more serious studies, he is confident he should never have gone to press for the sake of defending the opinions in question, had he not been called upon and irresistibly pressed by that profound scholar and worthy man, Dr. Rees, to furnish the article GOTHIC ARCHITECTURE, for the grandest and most copious work in the English language, his new CYCLOPÆDIA. In drawing up that article, the author found himself precluded by the nature of the work, from availing himself of the numerous historical authorities he had collected in support of his system. Hence he came to the resolution of publishing the pre-

sent treatise in order to confirm and illustrate the article in the CYCLOPÆDIA, and to detail this system at greater length than he was able to do in that work.

But to return to the principal subject: the first of the positions advanced above, namely, that Pointed Architecture grew out of the Pointed Arch, seems to be generally admitted at the present day. Upon the two others, various and uncertain judgments have been formed. Thus much, however, seems clear from the discussion, that there is a wayward disposition in many learned men which leads them to believe any thing rather than what they see before their eyes, and to admit any other ancient people, even barbarians and ruthless destroyers of the

arts, to have been ingenious and capable of making a curious discovery, rather than their own high minded, magnificent, and enterprizing ancestors, who nevertheless were, beyond all dispute, the first people of the age (in which Pointed Architecture was invented, and attained its first growth), for prowess and grand undertakings in general, and the most studious of ecclesiastical architecture in particular, that any age or country ever produced.

Not content with defending his former system, the author has gone a step beyond it in the present treatise. He has attempted to refute the common objection that Pointed Architecture is destitute of orders, rules, and proportions. In opposition to this, he has maintained, that

there are three Orders of the Pointed Style, as distinct from each other as are the orders of Grecian architecture, having their respective members, ornaments, and proportions, though the essential and characteristical difference among them consists in the degree of angle formed by the pointed arch. Hence he shews that there is hardly less barbarism in confounding these orders, as for example by intermixing the obtuse angles of the third order with the acute angles of the first, in the manner that has sometimes been witnessed of late, than there was in uniting Grecian and Pointed Architecture together, as was so often done, one and two hundred years ago.

To those persons who may wish to form a general idea of the nature and effect of these respec-

tive orders, without entering into the detail of them, the three last plates in the present work cannot fail of being acceptable. He trusts that the views which they contain will convince the most superficial observer of the propriety of his division of Pointed Architecture into three distinct orders, and of the justness of his reasons for giving a preference to the second Order.

Plate VIII. shews the first order, in an interior view of the East end of Canterbury Cathedral, built at the latter end of the twelfth century. Plate IX. exhibits the second order, in an interior view of York Minster, the erection of which may be placed at the beginning of the fourteenth century. Plate X. presents a specimen of the third order, in an inside view of the

Lady Chapel of Westminster Abbey, built by Henry VII. at the very beginning of the sixteenth century.

It may be observed, that the East end of Canterbury Cathedral, Pl. VIII. with the few exceptions mentioned in the Treatise, is entirely in the Pointed Style, and is probably the most perfect specimen of it extant, of so remote a date. It is highly grand and awful; still there is a degree of plainness and heaviness about it, which marks the first gradation from the ponderous simple Saxon Style. The Pointed Arches are irregularly formed, and, for the most part, are too acute to be graceful. The latter circumstance is more distinctly seen in the Arches of the gallery at the Eastern extremity, which are exhibited in Pl. VI, fig. 27.

There also may be seen one of those double circular Pillars, which may be considered as the first attempt to produce the cluster column. It may be observed that the apsis, or East end of the choir, where the Bishop heretofore had his Throne, and the Clergy their Stalls on each hand of him, at the back of the Altar, is semicircular. Such was the general form of this part of the Sacred Fabric, till large east windows were introduced about the beginning of the 13th century. It being in some sort, necessary that these should be in a straight line, and that the altars should be placed almost under them, to produce the desired effect; hence the choirs, about that period, were removed to the front, or westward of the altars. Another important re-

mark here occurs. The writer has observed, in his Treatise, what an incomparable advantage it is to the Architectural Student, in surveying this very interesting structure, to be possessed of a minute and accurate account of the building of it, drawn up by an intelligent eye-witness, Gervase, a monk of this Cathedral. Now it is to be noticed that, in his description and praises of the work, he never once intimates that the style of it, or of any part of it, was borrowed from Syria, Arabia, France, Spain, or Italy, but that he appears to attribute the merit of the whole chiefly to the ingenuity of its two architects, both of them of the name of William.

The view of Henry VIIth's chapel in Westminster Abbey, exhibited in

Plate X. will arrest the eye and gain the chief and unqualified applause of many a spectator.[d] No doubt, it is grand and awful in itself, and still more so when compared with most modern places of worship; still we must not forget that its characteristical features are magnificence, ingenuity, delicacy, and elegance. In these qualities it stands unrivalled among similar structures throughout the world, and hence it might aptly enough be said, by a former author, to have been *knit together by the fingers of angels.* Nevertheless, in the present writer's opinion, it is too

[d] The tracery work in this small view, appears so very rich and intricate, that it was only by an outline, or etching, an adequate idea of its beauty could be clearly represented. A Plan of the Ceiling may be seen, laid down geometrically, in *Britton's Architectural Antiquities.*

gorgeous and too elaborate to produce the proper effect of such a structure, *in its highest degree;* and the pendent capitals, in particular, which are its most striking ornaments, are more calculated to shew the skill of Sir Richard de Bray, its architect, than to add to the awfulness of the place. They certainly bring down the groins nearer to the eye instead of producing an artificial height, which is so favourable to sublime sensations. It must be added, that the arches, where we see them in their simple form, namely, in the intercolumniations on the sides and over the doors, are exceedingly obtuse or flat.

For the abovementioned reasons, the judicious observer, after admiring the magnificence and delicacy of this

gorgeous chapel, will turn with pleasure to contemplate the chaste and appropriate decorations of the Second Pointed Order, displayed in York Minster. Here every part is ornamented, and yet no ornaments appear redundant or crowded, none but what seem to have their use, and to be duly subordinate to the proper effects of the sacred fane, namely, awfulness and devotion. The massive columns, which principally sustain the stupendous pile, are so judiciously divided into clusters as to appear comparatively slender. The tallest shaft in each of them, rising to about two-thirds of the perpendicular height of the lofty groins, is there crowned with a sculptured historic or hieroglyphic capital. From this spring three

principal ribs, which diverge, at their respective knots, into other shorter ribs, after a simple but elegant design of tracery, so as to give the appearance at once of lightness, beauty, and height to the towering canopy which they support. From the same tall shaft proceed two lateral ribs, which meeting in a point with similar ribs from the adjoining columns, form the arches of the beautiful windows of the nave. The mullions of these windows, being continued down to the bottom of their story, by an unusual but happy contrivance, form those of the light and uniform triforium or gallery. Other shafts of the main cluster sustain the springers, which support the well-turned arches of the intercolumniations, while additional springers, meeting with cor-

responding ones from the clusters in the walls of the aisles, produce their enchanting long-drawn vistos. Answering to the open intercolumniations are the windows of the aisles, rich with elegant tracery, but not obstructed by it. As the windows of the nave, by means of the mullions of the open gallery, are continued down to a line just over the crown of the main arches, so the dado or open space beneath the windows of the side aisles, down to the stone seat near the pavement, is enriched with an appropriate arcade of the most elegant stall-work. In short, as no spectator, who has eyes to see and a soul to feel, would wish a single ornament in the Minster nave to be removed or altered, so, it is presumed, that no judicious ob-

server would recommend the addition of a single new ornament to it; and still less the gorgeous vaulting of King's College, or of Henry VIIth's Chapel.

It must be observed, that the author has preferred interior views of churches, for illustrating the present work, to exterior ones; because whatever pains our ingenious ancestors bestowed on the façades and other outside work of these fabrics, it is certain that their chief art and magnificence was expended on the inside of them; for, as it has been frequently signified, their object was to excite those devout sensations for the sake of which the Pointed Style itself was invented. In this point their ideas differed essentially from those of the Pagan, and also of

most modern architects, whose sacred structures, I mean those in the Grecian style, when viewed exteriorly, often present grand emotions of the mind, which, however, generally die away at the first glimpse of their naked and mean interior.

The claims of our ancestors in both respects, that is to say, both as to the discovery and the improvement of Pointed Architecture, have been warmly contested, of late, by a Divine of extensive reading and acute observation, [a] and by a young Nobleman of the greatest hopes to science [b] both of whom seem to have travelled as well as to have written in order to prove that this style

[a] The Rev. G. D. Whittington. Survey of the Ecclesiastical Antiquities of France.

[b] See Preface to the above work.

appeared earlier and was carried to greater perfection in France than in England. These pretensions have been opposed with equal warmth and firmness by an Architectural Antiquary, [c] to whom his professional art is more indebted for its illustration, for the preservation of some of its choicest monuments, and for directing aright the public opinion and taste concerning it, than to any other individual whomsoever. There certainly has been too much warmth on both sides. Controversies in general, particularly on scientific subjects, in order to conduct to truth, require to be discussed with coolness and without any mixture of national or other partiality. The author is

[c] Mr. John Carter, Architect. See different numbers in Gent. Mag. 1809-10.

not conscious that he has been influenced by any such temper in the system which he defends. On the contrary, he flatters himself that he has built upon historical and critical evidence alone.

POSTSCRIPT.

JUST as the press is closing, the writer sees certain strictures on Mr. Britton's Architectural Antiquities in the last Quarterly Review, (No. 8,) which, if well founded, must prove fatal to a part of the system contained in the present publication; what the Reviewers say, is as follows: "A powerful "attempt has recently been made, in the valuable "work of Mr. Whittington, to revive and confirm "the supposition of the invention of the Gothic "Style in the East; a supposition, which was "started by Wren, accepted by Lowth, and main-"tained by Warton; and *which seems to receive* "*a further support, from the fact recorded by* "*Matthew Paris, of the employment of captive*

"*Saracens, as labourers under European archi-*
"*tects.*"---The writer has consulted the passage of Matthew Paris, here referred to, which had before escaped him, and finds it to stand thus: "A.D. 1184.---Quo mortuo (Macemut) totus ejus "exercitus fugit, omni pecuniâ relictâ. Rex vero "Portugalensis ex captivis Saracenis dedit servos "qui cementariis ministrarent ad ecclesias re-"parandas; et de pecunia, Sancto Vincentio au-"ream fecit thecam."---The question between the Reviewers and the writer now is, how far this relation of the intelligent monk of St. Albans, proves that the Pointed Style of building was derived to Europe, from Arabia or other Eastern countries, through the Moors of Spain? The writer, for his part, is of opinion, that the quotation, so far from proving this fact, proves directly the contrary. What it asserts is, that the Saracen Chieftain, Macemut, being killed, and his army being dispersed, the victorious king of Portugal devoted the treasures which they left behind them to the construction of a golden shrine for the relics of the celebrated Spanish martyr, St. Vincent, and the captive Saracens to serve the masons, who were employed in repairing the Churches, which had been desolated by the ancestors of these captives. In fact, both the Moors and the Christians of the Western Peninsula were in the habit of making their victories

over each other subservient to the advancement and splendour of their respective religions. Thus when Almansor took Compostella, he forced a considerable number of his Christian captives to carry the bells of the Cathedral Church on their backs to his capital of Cordova; and, by the same rule, when Ferdinand III. of Castile, became master of Cordova in 1236, he obliged a number of the Moors to carry them back to Compostella in the same manner. He also made it a rule to dedicate the spoils which he took in his numerous conquests over these Mahometans, to the advancement of Christianity in one shape or another. Such was the nature and intent of the King of Portugal's decree in 1184, with respect to the emoloyment of his Saracen prisoners. He did not set them to work in repairing the Churches, for any skill which they possessed in a style of architecture, so peculiarly adapted to ecclesiastical purposes, otherwise he would have put Saracen architects and masons in requisition, instead of masons' labourers; but he condemned a certain number of them, as many, we may suppose, as could be so employed, to devote their personal toil to the re-establishment and splendour of the Christian religion.

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A

TREATISE

ON THE

ECCLESIASTICAL ARCHITECTURE

OF

ENGLAND, &c.

CHAP. I.

The little light which is to be derived from the History of the Middle Ages concerning the different Styles of their Architecture—Still it is from History and coeval Monuments, that certain information in this matter is alone to be obtained—Principal object of the present Treatise—Ambiguity of the terms hitherto employed in treating of the Architecture in question—The writer's opinion on this Subject.

NEXT to the intrinsic beauty and sublimity of the pointed architecture of the middle ages, the circumstance which principally excites our admiration, is the silence of con-

temporary writers, concerning the inventors of it, and the very country where it first appeared. We frequently read in the annals and biographical histories of those times, of churches and other ecclesiastical buildings being built or repaired in a new style of elegance and with additional magnificence; and we clearly discern the emulation which existed among the founders and architects of these structures to outdo each other in the decorations and grandeur of their respective works, which emulation could not fail of producing improvements in an art not then subject to any fixed rules: still there is no record extant to inform us who first broke the architectural semicircle of former ages, into the aspiring arch of the pointed style; who devised to split the ponderous pillar of the established orders, into the light cluster of our Cathedral columns; or who began to ramify the plain mullions of our windows and the ribs of our vaults

into the rich tracery of our bays[a] and groins. It is even still a subject of controversy to what part of the world we are to look for these singular discoveries. But, indeed, the same mist of obscurity hangs over the origin of bells, organs, clocks, painted glass and other important inventions of the ages, injuriously called *the dark ages* by the vain and superficial one in which our lot is cast. Thus much we may gather with certainty from this very silence of our religious ancestors and their general indifference with respect to posthumous fame, that they were more anxious about being good and useful than appearing so.

Still it is from the records and monuments of the ages in question, and not from the fanciful theories or unsupported decisions of modern architects or other writers that such light as can be collected concerning these matters is to be obtained. Perhaps, after all,

[a] Bays or days the ancient name for separate lights in a window.

this light, though dim and unsteady, may be found sufficient to lead the careful and unprejudiced inquirer to a satisfactory conclusion on the principal points in discussion. But then the records which are consulted ought to be coeval, or nearly so, with the works they mention; or, if borrowed from later writers, these ought to be men of such acknowledged learning, judgment, and fidelity, as to be entirely depended upon.

Then, as to the monuments, there must be sufficient evidence that they are the genuine unaltered productions of the æras to which they are attributed. For so numerous have been the changes in most ancient structures, either from alterations of the style, or from the necessity of reparations, that without the greatest judgment and knowledge in these matters, as well as the nicest and most jealous attention to them, we are constantly exposed to the grossest anachronisms and other errors in pronouncing upon them. On this account coeval medals, carvings, mo-

saics and paintings, representing ancient buildings, frequently afford better evidence as to their former state than the actual sight of the originals do, as being free from those alterations to which the buildings themselves have been exposed.

The principal object of the present essay, which the author of it has been called upon to undertake both by his scientific allies, and his antagonists, is to ascertain the origin, progress, and orders of the pointed architecture of the middle ages. This, however, cannot be done, in a clear and satisfactory manner, without treating, at considerable length, of the circular style which prevailed in the preceding portion of those ages, and without clearing up the obscurity in which certain celebrated architects and writers have enveloped both these styles by the uncertainty and confusion of their language and ideas concerning them.

The restorers of the Grecian Orders in Italy, by way of disgracing all the archi-

tecture of the preceding centuries, not conformable to them, called it indiscriminately *the Gothic*.[b] In this they have been followed by modern French architects as likewise by Sir Christopher Wren, Mr. Evelyn and other English writers, whose ignorance or whose prejudice has even led them to believe that the Goths and other barbarians of the fourth and fifth centuries really invented a new style of architecture which they substituted for that of the Roman monuments they destroyed. The celebrated architect of St. Paul's quotes, with applause, what he calls, "Mr. Evelyns judicious com-" parison of the ancient and modern styles," where the latter says; "The ancient Greek "and Roman architecture answers all the

[b] The Italians more generally called the pointed style by the name of *Tedesco* or *German*, because the specimens of this style which they were best acquainted with existed in Germany; and because the architects who raised the few pointed structures which are found in Italy were mostly Germans. Ciampini, speaking of the canopy of an altar raised in the Old Vatican by Pope Boniface VIII. in 1290, terms it: "Ciborium cuspidatum, Germani operis, cujus architectus fuit quidam Arnulphus." De Sacris Ædificiis a Constant, Magn. Construct. p. 65.

" perfections required in a faultless and ac-
" complished building, and doubtless would
" have still subsisted and made good their
" claim, and what is recorded of them, had
" not the Goths and Vandals and other bar-
" barous nations subverted and demolished
" them, together with that glorious empire,
" where those stately and pompous monu-
" ments stood; introducing in their stead a
" certain fantastical and licentious manner
" of building, which we have since called
" Modern or Gothic: congestions of heavy
" dark, melancholy, monkish piles without
" any just proportion, use or beauty."[c] The architect having thus commended this invective of Mr. Evelyn against Gothic architecture, as being heavy congestions of " monkish piles," goes on to abuse it for possessing precisely the opposite character, where he says: " The irruption of swarms " of these truculent people from the north,

[c] Sir Christopher Wren's Parentalia.

"the Moors and Arabs from the South and "East, overrunning the civilized world, "wherever they fixed themselves, began to "debauch this noble and useful art: when, "instead of those beautiful orders, so ma-"jestical and proper, they set up those "slender and mis-shapen pillars, or rather "bundles of staves, and other incongruous "props, to support incumbent weights and "ponderous arched roofs without entabla-"ture."[d] We shall afterwards see that the celebrated Bishop Warburton, at the same time that he speaks with admiration of pointed architecture, actually ascribes the invention of

[d] Parentalia.—Not very conformable with this idea but in conformity with that of Mr. Evelyn, Sir Christopher elsewhere describes our sublime and beautiful Cathedrals (so much superior as places of divine worship, to all that he could borrow from the Pagan temples) as "Mountains of Stone, vast gigantic buildings, "but not worthy the name of architecture." Ibid.—To the prejudiced and extravagant declamation of one English architect, on this subject, we are glad to oppose the rational and liberal sentiments of another. Sir William Chambers in his work on Civil Architecture, says: "We are indebted to those called Gothic "Architects for the first considerable improvements in construc-"tion. There is a lightness in their works, an art and a boldness "of execution to which the ancients never arrived, and which the "moderns comprehend and imitate with difficulty."

it to the Goths, with the help of the Moors. The same confusion of language prevails among later writers, whose ideas are more correct on the subject than those of the authors just quoted. A late celebrated antiquary who frequently praises the pointed style under the name of Gothic, and who had planned a history of it, positively denies that "Salisbury Catheral is absolutely Go-"thic,"[e] while another architectural critic, of still greater fame and merit, as positively asserts that "Salisbury Cathedral is entirely "in the Gothic style."[f] Certain writers who confess the impropriety of the term *Gothic Architecture*, still persist in applying it to the pointed manner,[g] whilst others, who are indignant at the unjust reproach

[e] The Rev. Thomas Warton, Notes on Spencer.

[f] The Rev. J. Bentham's History of Ely Cathedral, Sect. V.

[g] The Rev. James Dallaway in his learned Observations on English Architecture, occasionally applies the term Gothic to the Pointed style: while the Rev. G. D. Whittington terms it so in his very title page. See an Historical survey of the Ecclesiastical Antiquities of France, with a view to illustrate the rise and progress of Gothic Architecture in Europe.

which they conceive is thereby cast upon one of the happiest inventions of the human mind, call it, some the *Norman style*, others the *English style*,[h] these the *Cathedral style*, those the *Pointed style*. The writer long ago expressed his decided preference of the last of these terms,[i] and he is of opinion that the present dissertation will shew its propriety.

[h] See Appendix A.

[i] See "Observations on the means necessary for further illustrating the Ecclesiastical Architecture of the Middle Ages," by the writer, prefixed to Mr. J. Taylor's collection of *Essays on Gothic Architecture*.

CHAP. II.

Decline of Architecture in the Roman Empire—Form of the ancient Basilics and other churches—Decline of Ecclesiastical Architecture in the Greek no less than in the Latin Church—The Ecclesiastical Architecture of this Island at its Conversion to Christianity that of Rome, being introduced by Missionaries from that City—Our Saxon Ancestors soon became eminent in Ecclesiastical Architecture, still following the Roman Fashion—Genuine Saxon Architecture difficult to be met with, but Representations of it not uncommon—Vindication of this Architecture from Modern Misrepresentations.

Perpetual change is the condition of all human things: accordingly the arts and literature, like the power of the great Roman empire, when they had attained to their utmost height in the Augustan age, began, soon after, to decline from it. This was particularly the case with its architecture. Critics in the Grecian orders remark, that the triumphal arch of Severus is less perfect than that of Titus: whilst the monument of Constantine's triumph over Max-

entius, erected by the senate and people of Rome, is charged with columns, statues, and other ornaments, purloined from the arch of Trajan, and irregularly placed. It was chiefly from about this period, namely, the beginning of the fourth century, when Christianity became the established religion of the civilized world, and when churches were every where opened for the public exercise of it, that the prevailing architecture began to exhibit sensible marks of barbarism.[k]

These churches were not always built from the ground; for in several instances the emperors gave up their palaces and courts of justice, called *Basilics*, for the service of religion. The form of these,

[k] See the medals of the abovementioned tyrant Maxentius, PL. I. *fig.* I. and that of Licinius, who was during some time, fellow-emperor with Constantine, published by Speed in his History of England, and copied in PLATE I. *fig.* II. In the former medal a temple is seen with capitals, bases, and a nebulè moulding, approaching to the zig-zag, which, had they appeared in architecture instead of a medal, would certainly be post-dated many hundred years. In the latter medal we see a highly pointed cornice or canopy over a circular door.

being oblong and surrounded by porticos or aisles, raised upon columns, with galleries very frequently over these, was found very suitable both to the majesty and the uses of religion. Little more was requisite for the latter purpose than to shut up the porticos exteriorly with walls and doors, [l] to cover in the open area in the middle with a roof, where wanting, and to place an altar near the upper end opposite to the bishop's throne, and an ambo, or pulpit, somewhere about the middle of the nave. We shall exhibit an elevation of an ancient Roman basilic in its original state, such as may be expected from a small medal[m]; as also the plan of one in actual existence, which was changed by Constantine into a church. It was formerly called the Sessorian Basilic, and since, the Church of the Holy Cross of Jerusalem. In this plan we shall point out

[l] Appendix B.

[m] PLATE I. *fig.* III. It is copied from Ciampini's Vet. Monum. T. 1. pl. xxi.

the principal parts and general arrangement of a church in primitive times, according to the best ecclesiastical antiquaries[n], as far as these were common to the Greeks and the Latins, and to the different forms of the sacred edifices: for some of the churches were built circular or octangular, others in the shape of a cross: still the general form of them was oblong, with a semicircular apsis at the eastern end; and the disposition of the sanctuary, the altar, and the narthex, or penitentiary porch, at least, was the same in all churches.[o]

As a general outside view of an ancient Roman church, we have copied the Mosaic picture of the Church of St. Agnes, which

[n] Montfaucon. Diar. Italic. Le Brun. Liturg. T. 2. Allatius, &c.

[o] See PLATE I. *fig.* IV. Plan of the Church of the Holy Cross, from Ciampini's Vet. Mon. T. 1. pl. iv. compared with those of St. Clement and other churches described by the abovementioned ecclesiastical antiquaries. A A The Apsis forming the Presbytery. B The Bishop's Throne with Stalls for the Clergy. C C The Sanctuary or Chancel. D The Altar. E The Gradus or steps. F F The Nave. G The Ambo or Pulpit. H The Tribune for Women. I The Tribune for Men. K The Narthex or Penitent's Porch. L The Door.

is proved to have been executed by order of Pope Honorius, about the year 621[p]. The Pope is here represented in his dalmatic and pallium, bearing in his hands the present representation of the church of St. Agnes, which was built by Constantine the Great, at the beginning of the fourth century, and repaired as we have said by Honorius early in the seventh. We here see a porch or cloister surrounding the church, and closed up except at the west end, where the entrance into the narthex is barely covered with a curtain, as was the custom in that age, with respect to the first entrance into palaces as well as churches. The porch at the east end sweeps round to form the circular apsis. The windows of the nave are small and round headed, while those of the porches or aisles are square, and the whole sacred structure, which is of the oblong form, is destitute of ornaments.

[p] This is expressed in the inscription under the picture executed in the same Mosaic work. See *fig.* V.

Such, we may venture to say, was nearly the form and disposition of the Saxon churches built by St. Paulinus and our other primitive architects, the cotemporaries of Pope Honorius, at York, Lincoln, Rochester, Dorchester, and elsewhere.

The same decline in the arts which is observable in the monuments of the western empire, particularly after the beginning of the fourth century, is also to be traced in those of the eastern empire[q]. The celebrated Church and Choir of the Holy Sepulchre at Jerusalem, which, after all that has been said and written about them, cannot be proved to have been rebuilt or essentially changed since they were erected by Constantine's mother, St. Helena, about the year 320, constitute altogether a most noble fabric; still an air of Saxon nakedness and rudeness pervades the whole of them, and the very columns with

[q] The gradual decline of the arts from the fourth down to the twelfth century, when they began to improve in the Greek as well as in the Latin Church, may be traced in Dufresne's Series of Medals published in his Historia Byzantina.

their capitals, &c. though of the Corinthian order, are quite disproportioned, and destitute of entablature[r]. This rudeness of design and execution is still more visible in the boasted church of St. Sophia at Constantinople, rebuilt by the Emperor Justinian, in 637, and still existing as a Turkish Mosque. We shall give a partial view of its interior, and another of one of its external porticos. These will convince the architectural antiquary, that the Grecian orders were not much more attended to in their native land during the seventh century, than they were in Italy and France[s].

To speak now of our own country: the Romans were not so completely masters of it, as to allow of their raising any grand structures in it, till their architecture was

[r] See the interior views of the Church and Choir, both of them being, as to their essential parts, circular, in Cornelius Le Bruyn's Voyage to the Levant.

[s] See Pl. 1. *fig.* VI. being part of the exterior porch in front of the building, from Dufresne. Also Pl. 2. *fig.* VII. being a portion of the inside of St. Sophia, copied from a view of the whole, in the elegant work of M. De. D'Ohsson, L'Empire Othoman.

upon the decline. Accordingly we meet with nothing perfect or very elegant in such ruins of their temples, houses, baths, hypocausts, or other erections, as have been discovered in Britain. Afterwards, when the Ostrogoths and Huns overran Italy, the Visigoths and Suevi Spain, the Franks and Burgundians Gaul, and the Saxons Angles and Jutes South Britain, all which invasions took place in the course of the fifth century, these several hordes of barbarians destroyed innumerable monuments of ancient architecture, but they did not busy themselves in raising other structures in their place. It does not appear that they were then acquainted with any of the decorations or uses of architecture beyond what are found in a military tent, or a rustic cabin; and, when they sat down to inhabit the countries they had conquered, instead of teaching the inhabitants a new species of architecture, (which they are supposed by some writers to have brought with them from their na-

tive forests and wilds) they employed these very inhabitants to raise their principal structures according to such knowledge and experience as remained of ancient art. So absurd is the idea that the Goths invented any species of architecture whatsoever, and especially the elegant pointed style!

It would be no less contrary to reason to attribute the invention of that heavy circular manner of building in which our first churches were raised, to the Saxons. It is called the Saxon style, merely because it prevailed during their dynasty in Britain; but, in fact, it is the Grecian or Roman style, having the essential characters of that style, though, in consequence of the general decline of the arts, rudely executed. The truth is, it was introduced with Christianity itself, amongst our ancestors by missionaries from Rome, at the end of the sixth century.

At first, indeed, the new converts made use of such few churches as had been spared

by their fathers when they swept off Christianity, together with the professors of it, the Britons, from the provinces of England; notwithstanding most of these churches had been polluted with the worship of Thor and Woden[t]. When they began to build other churches, they were content, in the beginning, to make them of oaken planks or of wattles, thatched with reeds[u]. Such a

[t] St. Augustine, on his arrival at Canterbury, found a church called St. Martin's, which had been built whilst the Romans were masters of Britain. Bede's Eccles. Hist. l. 1. c. 26. There is no reason to doubt that the Pagan temples mentioned in chapter xxx. of the same book, had originally been Christian churches. See also Thomas Rudborne's Hist. Maj. Wint. l. 11. c. 1. Angl. Sacr. &. Mat. West. The latter, speaking of the Saxon invaders, says: "Si qua ecclesia illæsa servabatur (a Saxonibus) hoc magis ad confusionem, nominis Christi quam ad gloriam faciebant. Nempe ex eis deorum suorum templa facientes profanis suis ritibus sancta Dei altaria polluerunt." Ad ann. 586.

[u] "Ecclesiam S. Petri (Eboraci) de ligno construxit." Bed. l. II. c. 14. See also Hen. Huntingdonens. l. III. The Cathedral Church of the East Angles, till almost the time of the Conquest, [when it was removed from Elmham to Thetford, previously to its being fixed at Norwich,] was made of wood. "Vir prudentis consilia (Herebertus de Losinga) vagæ sedis non ferens injuriam; quæ nunc in vico qui Elmham dicitur in *sacello ligneo*, nunc vero apud Tefordense oppidulum habebatur, multum sibi locum Norwici comparabat," &c. Vid. Ang. Sac. Vol. I. p. 407. Finian, who had been a monk of the Irish Mo-

church still exists, or did exist not long since, at Greensted, in Essex[x].

It is true, that Edwin, the first Christian king of the Northumbrians, began to build a church of stone in his capital of York, soon after his baptism, namely, in 627, which church enclosed the wooden oratory he had first erected[y]; but we are expressly told by our venerable historian, that he was taught how to construct it by St. Paulinus, the same missionary from Rome who had converted him[z]. It appears, however, that Paulinus did not absolutely despise these wooden fabrics, since he himself built such a one at Catarick, This is plain from the reason which Bede

nastery of Hi, or Iona, becoming Bishop of Lindisfarn, is said to have "built a church, fit for his episcopal see, of sawn wood, "covered with reeds, after the Scottish (that is to say, the Irish) "manner. Fecit ecclesiam, episcopali sede congruam, quam tamen, "more Scottorum, non de lapide, sed de robore secto totam com- "posuit atque arundine texit." Bed. l. III. c. 25.

[x] See a view of it in Vetusta Monumenta, vol. 2. plate 7.

[y] Bed. l. II. c. 14.

[z] "Curavit, docente eodem Paulino majorem et Augustiorem "de lapide fabricare basilicam." Ibid.

assigns for the preservation of the altar, when the church itself, soon after its erection, was burnt down by the Pagans, namely, that the altar was made of stone[a]. This same Roman bishop and architect built another church of wood at the Mother of British Christianity, as it was called, the Monastery of Glastonbury, or to speak more properly, he cased the church which had hitherto consisted of wattles or hurdles[b], with boards, and then covered the whole with sheets of lead[c]. This method of

[a] L. II. c. 14.

[b] This instance of building a church in basket-work cannot fail of being acceptable, if it has not already occurred to a learned baronet, who is said to be eagerly following up his new and favourite system concerning the wickerwork origin of pointed architecture. It appears from William of Malmsbury, that the British anachorets of Glastonbury continued to follow their course of life in the fastnesses of their retired island, such as Glastonbury then was, during the whole period of the Pagan Saxon persecution. It is easy to conceive, however, that they must have practised their religion with great secrecy, which accounts for their having nothing better than a wattled hut for their oratory. This was preserved by Paulinus, out of reverence for the holy personages who had prayed in it, when he built a more decent church of wood and metal over it.

[c] Appendix C.

casing whole churches in lead was followed by other architects[d].

Our Saxon ancestors were diligent disciples of their Roman masters in architecture, as well as in every other art and science. St. Wilfrid, Archbishop of York, in particular, rendered himslf famous during the latter part of the seventh century, for the churches which he built at Rippon, Hexham[e], and many other places. The last mentioned church is celebrated by ancient writers, who had seen it, as a miracle of art[f]. He likewise repaired, in the best manner, his Cathedral of York, "covering the roof "with pure lead, and the windows with "glass, in such manner as to prevent the "entrance of birds and rain, and yet to "admit the light[g]." But then this prelate's journeys to Rome, and his visits to the churches there, and the instructions which he received from Archdeacon Boni-

[d] Appendix D.
[e] Appendix E.
[f] Appendix F.
[g] Eddius, c. 16.

face[h], and his engaging Roman workmen to execute his buildings in England[i], are all recorded.

The companion of his first journey to Rome was St. Benedict Biscop, who rendered himself almost as famous in architecture as St. Wilfrid himself, by the grand Monastery and Church which he built at Weremouth, adorning them with religious images and pictures[k], and glazing the windows with glass, which he caused to be made upon the spot. But he, as well as St. Wilfrid, made frequent journeys to Rome, in order to improve his skill in architecture, and to procure from thence various articles he stood in need of for his church, which church he professed to build according to the *Roman fashion*[l]. Hence we are not sur-

[h] Eddius, c. 5.

[i] Appendix G.

[k] Bed. Hist. Abbat. Wiremuth.

[l] Ibid. With the express testimony of Bede and Eddius before our eyes, as to the use of glass windows by our Saxon ancestors in the seventh century, we may judge of the knowledge of Sir

prised to find, that when Naitan, King of the Picts, was desirous of erecting a church in his own country according to the *Roman style*, he should send to Ceolfrid, the friend and successor of Benedict, for architects to build it[m].

Not only the general style, but also the particular members, and even the minute decorations, of what is called Saxon architecture, were, in a general way, brought from Rome. The regular dimensions, the characteristical mouldings, the eggs and anchors, the caulicolæ and volutes, together with the whole of Grecian entablature, were laid aside, or nearly so, both in the

Christopher Wren, in the *History* of Architecture, when he asserts that "the windows of the Saxons were *latticed*. In the same place he says they were *very narrow*, contrary to what every one knows to have been the fact. In like manner he mentions the present Cathedral of Winchester and the Chapel in the Tower of London as having been built *before the Conquest*. Parentalia—Letter to Bishop of Rochester. In a subsequent passage of the same work he says, that "Glass began to be used" at the time when tracery work in windows was invented, which invention did not take place till the thirteenth century!"

[m] Appendix H.

East and in the West, before our Saxon ancestors had learned to build without them.

The taste for the regular orders, and the skill necessary for executing them, being lost, it was natural for the workmen of the times to leave out the more intricate and difficult parts of them, or to supply their place with others more simple and feasible. Hence, in copying the Corinthian order, which they most affected, they cut off the richer part of the foliage, leaving nothing but the stem, or the bottom of it, or else they substituted rude forms of men, animals, or other fanciful figures of easy execution for it. The well-known Saxon mouldings, the chevron or zig-zag, the billet, the cable, the embattled fret, the lozenge, the corbel table, and a variety of such other ornaments as are supposed to be peculiar to Saxon architecture, will be found, on close examination, to have had their architypes in some or other of

the buildings, medals, tessellated pave ments, or sepulchres of Italy, before they were adopted by our ancestors[n].

Though there is reason to believe that a great proportion of the fabric of many ancient churches in this country is of Saxon workmanship, yet, from the various changes they have undergone, it is difficult to ascertain which particular parts are actually so. Such specimens are rather to be looked for in remote and barren situations in the country, than in towns and rich districts: though, even in the country, the poorest churches have, in general, been altered in their windows, and at the East end of them. It is not, however, uncommon

[n] An example of the chevron ornament may be seen upon an inscribed Roman tablet in Gibson's Camden, p. 835. See pl. 2. *fig.* VIII. and of the billet moulding in the copy of a Mosaic in St. Mary's Church of the New City. See Ciampini. tom. II. pl. 53. See pl. 2. *fig.* IX. These being the two most common, and considered as the most characteristical Saxon decorations, they are here engraved. The cable occurs in the tessellated pavement at Colchester and elsewhere. Each one of the other mouldings is to be met with in the Roman Catacombs. [See the plates of Bosius and Arringhi, or in the Mosaics, copied by Ciampini.]

to meet with portals of churches, which, from their known dates, as well as from the manner of their building, may be pronounced Saxon. Such, for instance, is the door way of Essenden Church, near Stamford[o].

These portals are generally round-headed, and contain rude carvings in the circular part, whilst the door itself is of a square form. In other respects, Saxon fabrics are known by their comparatively small dimensions; by the thickness of their walls without buttresses, and the diminutive size of their windows, which have round heads and are without mullions, by certain low cones which frequently cover the towers and flank the corners of the buildings[p]; finally, by the coarseness of the work. But, though we cannot refer to any entire Saxon churches now existing in their ori-

[o] See a representation of it in the Ancient Architecture of England, vol. 1. pl. xx.

[p] Such cones are seen at the East end of St. Peter's Church, Oxford, built by St. Grimbald in the tenth century.

ginal state, yet we can shew genuine representations of them: such, for example, are those on the marble fonts of Winchester Cathedral[q], and of the neighbouring church of East Meon[r]. The latter, in particular, we are sure is a true representation, from the resemblance of it, and the accompanying figures with those of Rheims Cathedral, as it is known to have been built by Archbishop Ebbo in the ninth century[s].

Mr. Bentham, in the celebrated fifth section of his History of the Cathedral of Ely, at the same time that he has thrown much more light than any former writer on the architecture of the middle ages, and has vindicated it from the absurd reproaches of Somner, Stow, and other writers, purporting that the Saxons did not know

[q] See Pl. 2 fig. X. copied from the miscellaneous plate in the author's History of Winchester.

[r] See Pl. 2 fig. XI. copied from Archæolog. vol. x. pl. xxii.

[s] See an engraving of it in Monfaucon's Monarch Franc. pl. 28

how to make stone buildings or to raise arches upon pillars[t], has fallen far short of doing justice to his subject, and has exposed himself to the same reproaches which he makes to the two last mentioned writers. In the first place he denies that the Saxons were accustomed to raise high towers above the roofs of their churches, till about the tenth century[u], and yet a very antient author whom he has elsewhere quoted, Richard Prior of Hexham, describes the church of St. Mary at Hexham, which as well as the neighbouring Cathedral of St. Andrew was built by St. Wilfrid in the seventh century, as being furnished with a tower of a round or cupola form; from which, he says, four porticos or ailes proceeded. From this description we learn that its plan was not unlike the plan of

[t] This section is published apart in Mr. J. Taylor's Essays on Gothic Architecture.

[u] Page 29.

St. Sophia's Church at Constantinople, built nearly about the same time[x], and that the tower resembled the one which we see in the representation of the church of East Meon. The churches of Italy are proved to have had bell towers in the eighth century[y]. But to make an end of the matter; we are assured by that ancient and careful writer, Eadmer of Canterbury, that the ancient Cathedral of that city, as it existed, during the whole Saxon period, had two towers, one over the south, the other over the north transept[z]. The same writer, Mr. Bentham, makes use of other arguments to persuade us that the Saxon architects were unacquainted with the form of transepts or cross-aisles in their churches till the above-mentioned æra, the tenth century.

It would certainly be strange if that form which had been adopted in the east

[x] Appendix I.

[y] Appendix K.

[z] Appendix L.

in Italy[a], and in France[b], during so many prior ages should not have made its way into England during four hundred years after its conversion. But we have seen above that St. Mary's church at Hexham was built in the form of a cross so early as the seventh century, as likewise the metropolitical church of Canterbury. We are likewise informed that the latter church was built after the form of old St. Peters at Rome[c]. Now this, no less

[a] The magnificent church of the Apostles at Constantinople was built by Constantine in the form of a cross; as St. Gregory, Nazianzen, who had frequently seen it, testifies. So was another raised by him at Mambre. See Bingham's Antiquities of the Church, Vol. I. B. 8. Le Brun Explicat. de la Messe, &c.—Hence we discover the mistake of Mr. Whittington, where he says: "It may be doubted whether transepts were adopted in Chris-" tian buildings of the age of Constantine." Append. p. 176.

[b] The church built by St. Cesarius of Arles, in the sixth century, and that of S. S. Vincent, and Anastasius at Paris, were of the same shape. Fleury Hist. Eccl. L. 33.—Bercastel Hist. Eccl. &c.

[c] " Erat ipsa ecclesia (Cantuariensis) Romanorum opere facta, et ex quadam parte, ad imitationem ecclesiæ B. Petri, &c. Eadmer apud Gervas.—The imitation is here restricted, because, no doubt, our Metropolitical Church never was furnished with a double aisle on each side of the nave, like St. Peters. As this celebrated church was so much the object of veneration and of imitation to

than the basilic of St. Paul, which still subsists as it was rebuilt by Theodosius in the fourth century, was certainly constructed in the form of a cross. The same learned writer denies that the use of bells, at least of bells of the larger sort, can be traced higher than the century in question; and he supposes that the introduction of them occasioned the construction of towers to receive them, by way of belfries. It would be strange if our religious ancestors had remained whole centuries without adopting so useful and pleasing an invention of the country

our Saxon ancestors, we shall present the plan and interior view of it from Bonani Temp. Vaticani Hist. See Pl. III Fig. XII. being the ground plan of St Peter's at Rome, as it had existed since the time of Constantine till it was taken down by Pope Julius II. copied from the archives of the Vatican. A. The Absis. —+The High Altar.—B. B. The Transepts or Cross Aisles.—C. C. The Nave.—D. D. E. E. The high side Aisles.—F. G. The low side Aisles.—H. The open Court in front of the Church.—I. The Narthex or Penitents Porch or Galilee—K. L. The North and South Porches of the quadrangular Cloister. Fig. XIII. an interior view of old St. Peter's. The exterior of the western façade shews a mixture of what we should call indifferent Norman and pointed work, inserted in the orginal Roman work.

which they so often visited[d]. The use of small bells *nolæ*, in this country, if we may credit William of Malmsbury, may be traced as high as the fifth century[e]. And it is clear from Bede, that even those of the larger kind, *campanæ*, such as sounded in the air, and called a numerous congregation to divine service, were employed in England as early as the year 680, being that in which the Abbess Hilda died[f].

Nothing then is more glaringly absurd than to suppose that the Goths and other barbarous nations who overturned the Roman empire introduced what we call the Saxon or any other style of architecture instead of the prevailing one. It is almost as extravagant to

[d] See the note page 33, concerning the belfry built by P. Stephen.

[e] "Brigida domum, rediens (A. D. 488.) relictis ibi (Glastoniæ,) "perâ, monili, *nolâ*, textrilibus armis, quæ ibidem ad ejus me- "moriam resurvantur." Gul. Malm. de Antiqui, Glast.—"Pa- "triarcha Dewy (David) quatuor muneribus ditavit *insigni nolâ* "&c." Viz. circa an. 500 Ibid.

[f] Appendix N.

say, with the learned Bishop Warburton, that "the piety of the Saxon kings consisted "chiefly in building churches at home, "and in making pilgrimages abroad, espe- "cially to the Holy Land;" and that "they took the whole of their ideas of "architecture from the religious edifices "in Palestine, and particularly from the "church of the Sepulchre at Jerusalem." This latter church according to Eusebius, was, as it is still, circular; now this form was exceedingly rare in our churches before the foundation of the Templars, in the twelfth century; on the other hand, not one of our Saxon kings or even prelates is known to have visited the Holy Land. In a word, it is demonstrated that architecture like the other arts of civil life, was inculcated to our ancestors by the Romans in the state in which they themselves practised it. Such was the state of things during the Saxon period, and down to the conquest; but not long after

this period, a new æra in architecture as well as in literature commenced. The most grand and beautiful improvements in the art of building were discovered and executed by those northern people, who have been reproached as the corrupters and destroyers of it. Then the scholars became the masters, and taught proud Italy the little she ever knew of the beauty and sublimity of the pointed style.

CHAP. III.

Devastation of the ecclesiastical structures of England and France, by the Danes and Normans.—Unexampled ardour of these invaders to restore Churches and Monasteries, upon their conversion to Christianity.—Almost all the Cathedrals and Abbeys of England rebuilt by the Normans.—This passion for Ecclesiastical Architecture produces improvements in it, and by degrees THE POINTED STYLE.

During the ninth and tenth centuries the civilized world, particularly the people of these islands and of France, were as much harassed and afflicted by new hordes of northern barbarians, as the former inhabitants, the Britons and Gauls, had been, four centuries earlier, by these very Saxons, Franks, and their kindred tribes, now become the most civilized and humane of christian nations. The latter invaders, who were indifferently called Danes and

Normans,[g] were even more cruel and destructive in their ceaseless incursions than the Goths and Vandals had been; because these were a sort of Christians, being half converted Arians, whilst the Danes and Normans, during the whole of their invasions, were savage barbarians, and professed persecutors of Christianity.[h] Few were the churches or monasteries in England, and throughout a great part of France, which were not demolished or laid waste by their fury. France by entering into a composition with them, and yielding up to them one of her fairest provinces, from this circumstance, since called Normandy, was much sooner delivered from the scourge than England was. This being effected, it is incredible with what ardour the French Princes, Nobles, and Bishops set about

g "Daci qui et Normanni." Hen. Hunting. L. III. "Dani "a suis nuncupantur Normanni, quia lingua corum Boreas North "vocatur." Wilhelm. Lib. I. c. 4. Gemiticensis. De Ducib. Norm. Lib. I. C. 4.

h We are told that during the period in question, the following supplication was inserted in the litany: "A Normannorum furore libera nos Domine."

rebuilding or repairing their churches and other religious edifices. Robert, surnamed the Pious, who succeeded to the throne of France at the latter end of the tenth century, for his own share, built fourteen monasteries, and seven other churches.[1] But he and all the other Christians of that period were far outdone in this respect by the Normans, who from impious barbarians, were now become devout Christians, and the greatest encouragers of literature and the arts of any nation then existing. This appears incontestible from the number of monasteries [that is to say, of the schools, as well as the religious houses of those times] which they then raised. During the reign of our William I. in Normandy, previously to his invasion of England, he himself built two princely abbeys at Caen, that of St. Stephen and that of the Holy Trinity; and his nobles built thirty eight others in that single province,

[1] Fleury Hist. Eccl. L. 59, S. 20.

each of them striving to surpass the rest in the magnificence and elegance of his structure[k]. We may be sure that the prelates were not behindhand with the nobility in zeal for building and repairing religious edifices. The abbeys erected at this time in Normandy, particularly those of Bec and Caen, became the most celebrated schools throughout Christendom, and produced the most able men; as, for example, Pope Alexander II. Lanfranc, and St. Anselm of Canterbury, and particularly the best architects of the age. Indeed most of those Norman prelates, who rebuilt the different cathedrals of England during the latter part of the eleventh century, and the beginning of the twelfth, had

[k] "In illis diebus (Regnante in Normania Gulielmo I.°), maxima pacis tranquilitas fovebat habitantes in Normanniâ, et servi Dei á cunctis habebantur in summâ reverentiâ. Unusquis que optimatum certabat in prœdio suo ecclesias fabricare, &c. Primum igitur ponam ipsum ducem, patrem patriæ, qui monasterium S. Trinitatis, ædificavit Cadomi.—Rogerius de Montegomerii indignans videri in aliquo inferior suis comparibus ecclesias duas nobiliter construxtit, &c." Wilhet. Gemetic. De Ducib. Norm. C. 22.

been educated in one or other of these abbeys. Such were the Normans at the time when they entered England, being without question, the most valiant, magnificent, studious, enterprising, and religious people of the eleventh century; and we must add, they were the very flower of Normandy and the neighbouring provinces, both in church and state, who crossed the sea and settled in our island. The continent was despoiled to enrich England. The effect of this important change in it soon appeared in every sort of improvement, but most of all in architecture[1]. The great ecclesiastical benefices, as may well be supposed, very quickly became filled with Normans. When, having wealth at their command, they did not fail of indulging, to the utmost, their passion for erecting grand churches and monasteries. In a very short time almost every Saxon cathedral, some of which had been but lately rebuilt, was

[1] Appendix L.

demolished and replaced by a new one on a grander scale, and in a more noble style. At one and the same time these vast and costly works were carrying forward by Mauricius in London, Lanfranc at Canterbury, Thomas at York, Walkelin at Winchester, Gundulph at Rochester, Remigius at Lincoln[m], William at Durham, St. Wulstan at Worcester[n],

[m] This prelate having removed his see from Dorchester to Lincoln, chose for the model of his new cathedral that of Rouen, which had been rebuilt a little before by Archbishop Maurilius, who had been a monk of Fescamp, in Normandy. This church was dedicated three years before the Norman Conquest; namely, in 1063. "Remigius, constitutâ ecclesiâ, et salubriter constitutâ "juxta ritum Rhotomagensis Ecclesiæ quam sibi in singulis, "quasi exemplar, elegerat, &c." Girald. Cambren. in Vita Ep. Linc. Angl. Sac. p. 417. It is well known that a fire took place in this magnificent fabric, during the episcopacy of his next successor but one, Alexander, who himself was one of the greatest architects of his age. It seems, however, clear from Giraldus, that only the roof was consumed.

[n] St. Wulstan, who was a Saxon, though he found himself obliged to follow the general example in rebuilding his cathedral of Worcester in the new style of magnificence, yet appears to have done this unwillingly. When the former structure, raised by St. Oswald, was taken down, the historian tells us: "Lachrimas tenere nequivit et dixit. Nos miseri sanctorum "opera, destruimus ut nobis laudem comparemus. Non noverat "illa fœlicium virorum ætas pompaticas ædes construere, sed

Robert at Hereford[o], Herbert at Norwich, St. Anselm at Chester[p], Roger at Sarum, in short by almost every prelate of every then existing cathedral in England. The abbots would not be outdone by the bishops: accordingly far the greater part of the rich and ample monasteries, such as St. Augustines, at Canterbury,[q] St. Albans,[r] Evesham,[s] Glas-

" sub qualicunque tecto seipsos Deo immolarunt. Nos, e contra " nitimur, ut animarum negligentes curam, accumulemus lapides." Gul. Malm. De Pont. L. 4. There cannot be a stronger proof than this passage affords of the increased magnificence of Norman architecture.

[o] " Robertus de Losinga ecclesiam suam Herefordensem de " novo construxit, et ad exemplar Aquisgranensis à Carolo " Magno extructæ efformandam curavit." Godwin. p. 480.

[p] Hugh Lupus, the great Earl of Chester, sent for St. Anselm, then Prior of Bec, to give directions for the building of the church and monastery of St. Werburgh, at Chester, which the founder was resolved to fill with monks from Bec. Malm. De Pontif. L. 1.

[q] A. D. 1074. " Abbas monasterie St. Augustini Cantuaræ " Scotlandus, (Normannus,) ad dilatandum monasterii sui tem- " plum largum extendit animum, &c." Gul. Thorn. Chron. Twysd. p. 1790.

[r] " Abbatiam St. Albani, per Paulum Abbatem in eum quo " nunc est statum (Lanfrancus) provexit. Malms. De Pont.

[s] A. D. 1077. Walter, a monk of Ceresia, became abbot of Evesham, and "being taken with the *new way of building*, he

tonbury[t], Malmsbury[u], Ely[x], St. Edmundbury[y], &c. were rebuilt in the whole or in a considerable part of them, with a zeal and an emulation in their builders, which had never before been equalled in any age or country of the world, and which could not fail of leading to improvements in an art not then subject to fixed rules. In short, all the great abbeys throughout the

" destroyed the old church, which was looked upon as one of the finest of its kind in England, and began a new one." Leland Collect. Tom. 1.

[t] Turstin, a monk of Caen, became abbot of Glastonbury in 1077, and began to rebuild the church of the monastery. He was succeeded in 1097, by Herlewin, who had been educated in the same Norman monastery; and who, "conceiving that the church be-" gun by his predecessor did not correspond with the grandeur of " his abbey, took it down to the ground, and began to build a " new one." Antiq. Glaston. Gale. p. 333.

[u] It appears from William of Malmsbury, that some great and expensive works were carried on at the church of his monastery by its Norman abbots, particularly by Warinus De Lyra. De Pontif. L. v.

[x] Vid. Thomam Eliens. Ang. Sac. T. 1. p. 611.

[y] Browne Willis. vol. 1. p. 85. N.B. The church of St. Edmund, at Bury, was not finished and dedicated for the first time till the year 1020, yet such was the rage for Norman improvements, that Baldwin, who became abbot of it only 40 years afterwards, namely, in 1065, took it down and rebuilt it in the prevailing taste. Leland Itin. V. 11. p. 165.

English realm, seem to have been rebuilt soon after the Norman Conquest; that is to say, during the latter part of the eleventh century and the beginning of the twelfth except Westminster, Gloucester, Waltham, and some few others very lately erected, at which time, from the connections of the sovereign and many of the prelates and nobles with Normandy, the refinements of that country had begun to gain a footing in England. A regard for their own safety after the conquest, and the orders of their master, spurred on the Norman lay barons to equal diligence in building castles with that of the great clergy in erecting churches[z].

But in what did this *novum ædificandi genus*, this improved manner of building, introduced by the Normans, consist?—Certainly not in its general style. We have

[z] "Ad Castra construenda (Rex Wilhelmus) omnes fatigabat," Huntingdonens. Vid. Chron. Saxon. A. D. 1086. Rudborne Hist. Major. L. v. c. 1.

evident proofs that the general plan of their sacred edifices, as well as their arches, piers, capitals, shafts, bases, mouldings, doors, and windows, was much the same as it had been since the first introduction of christianity into the island; in other words, it was an imperfect imitation of Roman or Grecian architecture. But, in the first place, the dimensions of their structures were, in general, much larger than those of the Saxons had been. We are expressly assured of this by the intelligent Malmsbury[a]; and we have other satisfactory proofs of it. With respect to the length, in particular, of their respective churches, we find, for example, that the Saxon cathedral of Dunwich was only 120 feet long, by 24 wide[b]. In like man-

[a] "Angli parvis et abjectis domibus totos sumptus absume-"bant. Franci et Normanni amplis et superbis edificiis mo-"dicas expensas agunt." Domi ingentia Ædificia, &c. Malm. L. iii. De Reg. p. 102.

[b] See the plan and account of it, by Mr. Wilkins, Archæol. V. xii. p. 166.

ner we see, by the vestiges of the ancient cathedrals of Sherborn, Dorchester, and other Saxon churches, that they were in general comparatively small. The celebrated abbey church of Abingdon was only 120 feet long:[c] whereas the magnificent Normans were not satisfied, either in their cathedral or grand abbatial churches, with a length of less than from three to five hundred feet. The cathedrals of York and Lincoln were, each of them built by their Norman Founders, 490 feet long. Walkelyn's church at Winchester, as built by himself, was 500 feet long. The Abbey church of St. Alban, as built under the direction of the great Lanfranc, was 600 feet long;[d] while

[c] Monasticon.—It may be here observed, that most of the churches on the continent, till near the time in question, had also been comparatively small. The celebrated church of St. Agnan, at Orleans, which was dedicated in 1029, was only 252 French feet long. The antient church of St. Clement, at Rome, exclusively of the exterior court and exedræ, was barely 180 such feet; while the wonder of the world, as St. Sophia was considered, independently of the exedræ, is barely 270 French feet long. See the plan of it in Du Frenes Familia Bysant.

[d] Browne Willis, Mitred Abbeys, Vol. I. p. 14.

the high-minded Mauritius, to the surprise even of his contemporaries[e], extended old St. Paul's, of London, to the length of 690 feet[f]. Nor was it only great length, but also great height, that the Norman architects affected. It is true the Saxon church of St. Andrew at Hexham, and perhaps some others, were three stories high[g]; there is, however, reason to conclude from the remains of some Saxon churches, and the representation of others[h], that they were seldom above two stories high, and those not very lofty; whereas the churches built by the Normans frequently rose to the height of 100 feet and more beneath the main beams[i]. The extraordinary height of the walls required buttresses to support them on the outside, and frequently torus's,

[e] Malms. De Pont. Londin.

[f] Dugdale's Hist. of St. Paul's.

[g] "Parietes tribus tabulatis distinctos" Ric. Hagulst.

[h] See the above engravings of the churches, carved on Winchester and Westmeon fonts, &c. Pl. II. Fig. X.

[i] Old St. Paul's was 102 feet. York Minster is 99 feet high, up to the crown of the arches, beneath the girders.—Of course they were much higher before they were vaulted.

running up from the basement to the plates in the inside.[k] These buttresses were, at their first adoption, broad, thin, shelving upwards in regular breaks, and quite unornamented. They are amongst the characteristics of Norman buildings.[l] The Norman work, in general, was executed with much greater firmness and neatness than that of the Saxons. Previously to the conquest, we constantly read of churches, of no long standing, being out of repair; whereas several Norman structures, as for example, the tower and transept of Winchester cathedral, after standing above 700 years, bid fair, with moderate care, to stand as many hundred years more. The Norman windows and portals were much larger, and better proportioned than those which preceded them and were generally supported by columns at the sides; their mouldings also, and other carvings,

[k] This may be seen for example, in the transepts, or cross aisles of Winchester cathedral.

[l] These also may be seen, without any subsequent alteration, on the outside of the North cross aisle of Winchester cathedral.

though not essentially different from those of the Saxons, were far better designed and executed. In short, next to the effect of sublimity, what these ingenious and indefatigable architects chiefly aimed at, in their religious structures, was beauty. An equal attention to these two effects did, by degrees, produce a perfectly new style in architecture, properly called, THE POINTED STYLE, being one of the greatest efforts of human genius, that has been witnessed in the course of ages. But, before we proceed to give an account of the rise and progress of this style, let us examine the theories of other writers on the same subject.

CHAP. IV.

Mistakes of other writers concerning the origin of the Pointed Style—Of Mr. Evelyn—Of Sir Christopher Wren and his followers—Of Mr. Murphy—Of the Rev. Mr. Whittington—Of bishop Warburton.—Of Mr. Smirke, jun.—Of Sir James Hall, &c.

It has been seen above that Sir Christopher Wren, and Mr. Evelyn, speaking generally of the architecture of the middle ages, under the opprobrious term of *Gothic*, describe the pointed, no less than the circular, style which prevailed in them, as being the real invention of Goths and other barbarians. The latter of these writers, as quoted with applause by the former, says, " The Goths " and Vandals, having demolished the Greek " and Roman architecture, *introduced* in its " stead a certain fantastical and licentious " manner of building, which we have since

" called modern, or Gothic,—of the greatest " industry and expensive carving, full of " fret and lamentable imagery, sparing nei- " ther pains nor cost[m]." We here clearly see that Mr. Evelyn, whose ingenuity and judgment are so much applauded by Sir Christopher Wren, in return for the praises the former bestows upon him, confounds together two different, or rather opposite styles, belonging to different periods; the one being as remarkable for its lightness, as the other is for its heaviness ; the one being pointed, the other round, and that he really believes both of them to be the genuine invention of the barbarians who destroyed the Roman empire. It is sufficient for the present purpose to remark, that the Goths and Vandals, who overturned the Empire of Rome, early in the fifth century, were themselves, with their very name, crusht and swept off from the civilized world in the

[m] Parentalia.

course of the sixth century;[n] whereas the pointed style, which is the subject of the present enquiry, by the confession of all writers, did not make its appearance in it till the twelfth century.

At the same time that Sir Christopher Wren commends the system of his friend, he himself departs from it. He will not have this style called *Gothic*, but *Saracenic*; and he professes to trace it, not to the Northern Goths and Vandals, but to the Eastern Arabs and Saracens. He says, "What we now "vulgarly call the Gothic, ought, properly "and truly, to be named Saracenic architec- "ture, refined by the Christians, which first

[n] The Ostrogoths entered Italy, under their king Alaric, in the year of Christ 400, and in the same year the Emperor Honorius yielded up to the Visigoths Gaul and Spain. In 409 the Vandals also established themselves in Spain; whence, in 427, they passed over to the Roman provinces in Africa, of which they soon rendered themselves masters. In 506 Clovis, King of the Franks, extinguished the power of the Goths in France. In 534, the Emperor Justinian put an end to the power and the name of the Vandals in Africa; and in 553 to the power and name of the Goths in Italy. In Spain alone the name of the Goths remained till 713, when Rodoric, its King, was killed, and the greater part of Spain was seized upon by the Moors.

" of all began in the East, after the fall of the " Greek empire[o]. The Holy War gave the " Christians who had been there an idea of " the Saracen works, which were afterwards " by them imitated in the West." This system of a Saracenic origin of the pointed style has, out of mere compliment to the name of its author, been adopted by bishop Louth[p], Riou, Warton, Grose, and the generality of modern writers, who have had occasion to enter upon the subject.

In refutation of Sir Christopher's system, it may be observed that the first, or grand crusade, in which the Conqueror's son Robert, the Earl of Albemarle, and many other Normans and Englishmen, amongst a million of other Europeans of different countries,

[o] Every one knows that the Greek Empire fell by the reduction of Constantinople and Trebizond, under the arms of Mahomet II. in 1453. But it would be a vain attempt to render Sir Christopher's *history* of Architecture consistent, either with the truth, or with itself.

[p] See his account of the architecture of Winchester Cathedral, in the Life of William of Wykeham, and the observations on this account, in the author's History of Winchester, Vol. II.

were engaged, took place in the eleventh century. It began in 1096, and terminated by the conquest of Jerusalem in 1099. Now nothing is more certain, and evident, than that the crusaders did not bring back with them into England or Europe, a single feature of the pointed style, since the churches built subsequent to that period; as for example, the ancient parts of Exeter[q] and Rochester[r] cathedrals, and the Abbey Church of Reading[s], &c. do not, in their original works, exhibit one of these features. If any individual, of that period, might be expected to have brought back with him into Europe, this supposed Eastern style, it was the celebrated monk of Bec Abbey, Gundulphus, who afterwards became Bishop of Rochester. He was the most celebrated practical architect of his age[t]. In fact, he built the cathedral church

[q] Built by B. Warwelast, in 1107.

[r] Built by b. Gundulph, about 1100.

[s] A. D. 1125.

[t] "Episcopus Gundulphus in opere cæmentarii plurimum sciens "et efficax erat." Ernulph de Roffen. Ecc. Angl. Sac. Tom. i. p. 338.

and monastery, and also the castle of Rochester, which latter he made a free gift of to William Rufus[u]; likewise Malling Abbey, the chapel within the keep of London Tower, and several other churches. Now this eminent builder had made a journey of devotion to the Holy Land[x], (in company with William, who afterwards became Archbishop of Rouen, and was himself one of the architects of its cathedral) a little before the first crusade, and, of course, surveyed the buildings of that country at his leisure. Yet in vain do we examine his subsisting works at Rochester, and in London, for an arch, a pillar, or a moulding, in the style under consideration. Secondly, from the accounts and drawings of the most intelligent and accurate virtuosi, such as Pocock, Norden, Shaw, Le Bruyn, &c. who have visited the Holy Land, and other countries frequented by the crusaders, it does not appear, as Bentham and Grose

[u] Ernulph. de Roffen. Ecc. Angl. Sac. Tom. i. p. 338.

[x] Monach. Roffen. Vit. Gund. Ang. Sac. p. 274.

remark, that a single building, or ruin, except one church at Acre, is to be found in this style[y], and very rarely such a thing as a mere pointed arch. It has been conjectured that this church was built by some European Christian, and the writer flatters himself that he has discovered the name of this European; and that he was an Englishman, who accompanied the Crusade under our Richard I.[z] In fact the architecture of it exactly corresponds with that of St. Hugh of Lincoln, Godfrey De Lucy, and other builders of that period, having long lancet windows, slender cluster columns, and corresponding ornaments. If we proceed further East, namely into Persia, we find indeed the pointed arch, in a few bridges, and other

[y] See a print of it in Voyage to the Levant, by Cornelius Le Bruyn. p. 164.

[z] "Cum primum Achon obsessa fuisset capellanus quidam, nomine Willelmus, natione Anglicus, votum vovit, quod si, prospero cursu Achon intraret, B. Martyri Thomæ capellam construeret; quod ita factum est." Mat. Paris, A. D. 1190. Peter de Rupibus, Bishop of Winchester, in the reign of Henry III. left money to this church.

public buildings: but we have no records to attest the date of any of these; and we have otherwise sufficient reason to believe them to be posterior, not only to Gengis Khan[a], in the 13th century, but also to Tamerlane in the 15th, both of whom swept off from that country all its monuments, and a great part of its inhabitants; hence these arches could not have been models of European pointed architecture. In India there are several Mausoleums, and other buildings, with the cinquefoil arch, and other decorations, which might seem to belong to the latest order of the pointed style. But these are confessedly of a very recent date.[a] There is no account at all of the building of the temple of Madura, which also has some resemblance with our pointed architecture[b]. It appears, however, not to be very ancient. The original style of India, as it appears in their stupendous excavations, and other an-

[a] See Daniel's Indian Views.
[b] Ibid.

cient works[c], is much the same with the primitive style of Egypt. The columns are circular, with huge heavy capitals and bases, still not without pretensions to ornament[d]. After all we may safely pronounce that these specimens in Egypt, the mother country of Athens, were the origin of the Grecian orders, and the primeval architecture of mankind.

Mr. Murphy, to whom the admirers of pointed architecture are indebted for his elegant views of the church of Batalha in Portugal, with his account of it, conjectures that the idea of pointed architecture was borrowed from the pyramids[e]. This is to trace its origin to Egypt. But the pyramids may be said, upon an average, to have been raised 3000 years ago; whereas pointed architecture is not yet 700 years old, and they

[c] See Daniel's Views.

[d] See in Pocock's Travels the columns at Carmach in Egypt; and in the late work of Denon, the French Sçavant, the ruins of the temples of Hermopolis, Thebes and Elephantis.

[e] Introductory Discourse on the principles of Gothic Architecture.

were forgotten, and almost unknown, at the time when it appeared. Again, pediments and gable ends must have been coeval with building itself, in every age and country; and therefore may be called the parents of pointed architecture, with more apparent reason than the pyramids. A circumstance, much more favourable to the pretensions of Egypt, is, that there is an ancient hall in the castle of Cairo, called Joseph's Hall, with regular high-pointed arches, and corresponding columns[f]. The inhabitants suppose this to have been built by the Patriarch Joseph; but Niebuhr, and Lord Valentia, give sufficient reason to suppose that it was built by the great Saladin, the rival of our Richard I. whose real name was Jussuff, or Joseph[g]. In this supposition, we may safely say that he employed some of his European prisoners, or other stragglers from the third

[f] See the View of it, by Mr. Salt, in Lord Valentia's Travels; also Luigo Meyers' Views.

[g] Lord Valentia's Travels, Vol. III. p. 311.

crusade, to erect this hall in the pointed style of the age.

It appears from a work lately published[h], that an ingenious young writer, the Rev. Mr. Whittington, and his Right Honorable Editor, have surveyed, (by means of prints) the architecture of the East, with different eyes from those of all former writers and travellers. The latter says, "All Eastern buildings, as far back as they go, have pointed arches, and are in the same style.[i]" "If a line be drawn from the north of the Euxine, through Constantinople to Egypt, we shall discover, in every country to the eastward of this boundary, frequent examples of the pointed arch, accompanied with the slender proportions of Gothic Architecture[k]."

[h] An Historical Survey of the Ecclesiastical Antiquities of France, quarto, 1809.

[i] Pref. p. 6.—Denon, who is an accurate observer, and writes from what he has seen, speaking of the Turkish Architecture, says, "Every province has its own taste: it has no fixed principles or rules."

[k] Ibid. p. 11.

It is impossible to conceive upon what ground the writer makes this strange assertion, except on account of the misshapen minarets and obelisks, which the Mahometans add to their mosques, for the conveniency of calling upon the people from them to come to prayer, as they reject the use of bells. The writer acknowledges that he does not know the dates of these erections, nor is it of any consequence to the present question that they should be known. Thus much, however, we know, that the edifice of St. Sophia at Constantinople, erected in the seventh century, (which he acknowledges to have been the model of the Mahometans, since they became masters of it, in the 15th century, in building their mosques) has neither a pointed arch nor a pinnacle in the whole of its original work[1]. But, adds this writer, " Is it at all pro- " bable that the dark ages of the West,

[1] See Views of it in Du Cange's Famil. Bysant. also Pl. II. *fig.* VII.

" should have given a mode of architecture " to the East[m]?" If there is any force in this suggestion, we may, with equal reason, deny that bells, organs, the gamut, or musical scale, optical glasses, gunpowder, the compass, printing, &c. were discovered in the dark ages of the West, and we ought to search amongst the barbarians of the East for their invention. The fact is, that between the fifth and the sixteenth centuries, the most enlightened was that in which pointed architecture was discovered; namely, the twelfth century; and that during this, particularly in the reigns of Henry I. Henry II. and Richard I. the natives of this realm, which then included the finest provinces of France, were, without dispute, the greatest people existing.

Bishop Warburton, whose bad success in accounting for the origin of Saxon Architecture, has been seen above, speaking of the

[m] Pref. p. 6.

pointed style, endeavours to unite the two refuted systems, that which derives it from the Northern Goths, and the other which brings it from the Eastern Saracens, at the same time that he assigns the Western peninsula of Europe (Spain) for the place of its birth. The following is what he says on the subject: "When the Goths had con-
"quered Spain and the genial warmth of the
"climate, and the religion of the old inhabi-
"tants had ripened their wits and inflamed
"their mistaken piety, (both kept in exer-
"cise by the neighbourhood of the Saracens,
"through emulation of their service, and
"aversion to their superstition) they struck
"out a new species of Architecture, unknown
"to Greece and Rome. For this northern
"people, having been accustomed, during the
"gloom of paganism, to worship the Deity in
"groves, (a practice common to all nations)
"when their new religion required covered
"edifices, they ingeniously projected to
"make them resemble groves as nearly as

" the distance of architecture would " permit; at once indulging their old " prejudices, and providing for their pre- " sent conveniences, by a cool receptacle " in a sultry climate; and with what skill " and success they executed their project, " by the assistance of Saracen architects, " whose exotic style of building very luckily " suited their purpose, appears from hence, " that no attentive observer ever viewed a " regular avenue of well grown trees, inter- " mixing their branches overhead, but is " presently put in mind of the long visto " through a Gothic cathedral, &c[n]." Having amused ourselves with this reverie, let us now attend to facts. The Goths and Vandals entered Spain in the year 409: they did not, however, acquire " a new religion there " from the old inhabitants," for they were previously Christians, though Arians. On the other hand, the Moorish Saracens did not enter Spain till three hundred years af-

[n] Notes on Pope's Epistles

terwards, namely, till the year 712, and they ever afterwards continued in a state of the most determined hostility against the Christian Spaniards, whom they cooped up in the mountains of Asturias. It is easy to gather, from these simple facts, the multiplied and gross errors of Bishop Warburton's system. Let us, however, suppose, in conformity with this system, that the Spanish Goths had retained an idea of their pagan worship in the woods of Germany, during 400 years, till the arrival of the Moors; and that, afterwards, they kept to themselves the secret of pointed architecture, during 400 years longer: certain it is that when once this system broke in upon the English and the French, in the twelfth century, it would have made its appearance at once amongst them, with all its characteristical features of equilateral pointed arches, connected cluster columns, crocketed pinnacles, and the other dressings of this style, contrary to what we know to be the

fact. With respect to the inhabitants of the Western peninsula, so far from their practising tracery work, imitating the interlacing of trees, several hundred years before our ancestors; it seems that the latter were their masters in the art of executing this above two hundred years, after they themselves had learnt it; since a subject of this kingdom was chosen to direct the building of the above-mentioned magnificent church of Batalha, in the fourteenth century°. After all, the intersection of tracery work is almost the only circumstance in which it resembles the intermixing boughs of trees growing together. The ribs of a groin do not grow smaller, as they extend

° It was built by John King of Portugal, in 1388, David Hackett, an Irishman, being the principal architect. See Murphy's account. We admire the style of Batalha, as a pleasing variety from our cotemporary buildings of Winchester cathedral, St. Stephen's chapel, Westminster, &c. but we by no means put it in comparison with them, upon the general principles of beauty and sublimity. The boasted cathedral of Burgos, built in 1221, is more gorgeous but by no means so elegant as its cotemporary cathedral of Salisbury, and far less awful than our more ancient cathedral of Lincoln.

themselves like vegetable shoots, nor do the latter, when they cross each other, form large knobs like the bosses of architecture. Again, the trunk which supports the boughs is generally a simple upright, not a cluster of supporters; nor has it any thing resembling either capitals or bases.

Having followed different guides North, East and West, in search of the primitive pointed style, we have latterly been invited by an ingenious artist to accompany him to the cradle of modern arts in the South, namely, to Italy, with the promise that he will there point out to us much earlier specimens of this style than our Northern climates afford. In the year 1805, Mr. Smirke, junior, laid before the Society of Antiquaries, certain drawings, since engraved[p], of the dressings of a window belonging to the cathedral of Messina,

[p] Archæologia, Vol. XV. p. 363, &c.

in the richest and most elegant taste of the third or last order of the pointed style. These he represents as the work of Roger Earl of Sicily, in the eleventh century. He presented another drawing of the celebrated baptistery of Pisa, avowedly built by Dioti Salvi in 1152 [q], consisting of what we should call Roman and Saxon work, intermixed with crocketed pediments and pinnacles, such as were not in use amongst us till the thirteenth century. Lastly, Mr. Smirke exhibited a view of the beautiful Cloyster of the Campo Santo, adjoining the cathedral, and erected in the year 1278. Here we see the richest tracery mullions under semicircular arches, being a mixture of styles which never prevailed at any period whatever in these countries. These exhibitions seem to have gained

[q] It was begun in 1152 and finished in 1160. We have a full and interesting history and account of the cathedral, baptistery and Campo Santo of Pisa, enriched with excellent plates, by Joseph Martini, a canon of that cathedral, in his Theatrum Basilicæ Pisanæ. Folio.

many partisans to the claim of Italy, and amongst others, to a certain degree, the ingenious Mr. Dalaway, who says, " The " Baptistery at Pisa, by Dioti Salvi, is " the great prototype of arches, pedi- " ments, and those ornamental particles " which are now confined to the Gothic " style[r]."

It has been already observed that there is no error which the architectural student has so much to guard against, when he surveys ancient buildings, as the confounding of subsequent alterations with the original work. There are few critics in this matter who would not start at the first sight of Mr. Smirke's drawings as at a creation of fancy, or an incongruous assemblage of works executed at periods considerably distant from each other; but it was reserved for Sir Henry Englefield's profound knowledge of the subject and critical acumen to detect the pointed en-

[r] Observations on English architecture. Pref. p. 4.

richments with which some later architect has decorated the plain circular work of Dioti in the Baptistery and of John of Pisa, in the Campo Santo.

This he has done to the entire satisfaction of his scientific readers[s]. In confirmation of this learned gentleman's remarks, we find that in the year 1303 [with the style of which period these additions very well agree] an architect, one Burgundius Taddi, added some new members to the exterior of this building, as an inscription upon it still testifies[t]. By way of supporting his system, in favour of the Italic origin of pointed architecture, Mr. Smirke next brought forward the upper part of the pediment of the cathedral itself, built by Bruschettus, a century before the building of the Baptistery, namely, in 1063[u]. This

[s] Archæol. Vol. XV. p. 367, &c.

[t] Theatrum Basil. Pisanæ p. 14, &c.

[u] The Church of St. Mark, at Venice, was built about the same time with that of Pisa, namely, in 1071, in the form of a

pediment consists of narrow circular arches, supported by Grecian columns, and surmounted with a coping, charged with crockets, and three elegant and spirited statues. With the exception, however, of the usual triangular form of the pediment and the crockets, which Mr. Smirke, may possibly, from the imperfection of his original sketches, have placed in a situation to which they do not belong[x]; there is not a

Greek cross surmounted with cupolas. It was evidently formed on the model of the Church of St. Sophia. The same operation has been performed upon it as upon the baptistery and cupola of the Cathedral of Pisa, namely, crocketed pediments and pinnacles have been inserted in it. In consequence of its present appearance, Sir C. Wren calls it *a Saracen church.* But the critic who can admit that these pointed ornaments belonged to the original structure, is capable of believing that the four famous horses by Lysippus, which have followed the course of victory from Greece to Rome, thence to Constantinople, thence to Venice (where during many ages they adorned the portal of this church) and lastly to Paris, made part of it's original design of St. Marks.

[x] Should Mr. S. still contend that the crockets are actually seen on the coping of the pediment, and (which is the only question of any consequence) that they formed part of the original work of Dioti, then he must equally say, that the three elegant and spirited statues which now ornament it, are the pro-

feature in this pediment which belongs to the pointed style any more than there is in the general style of the exterior and interior of the church itself, and of the campanile or leaning tower, which latter was built by William, a German architect, in 1174. Together with the abovementioned drawing of the pediment, Mr. Smirke presented one of the church towers of Li Frari, at Venice[y]. This shews the circular arch and the intersecting circular arch, together with the corbel table, &c. in its uppermost story, with rows of slightly pointed arches in the three lower stories. But what is the date of this tower? The ingenious artist tells us that it was begun in 1234, a period corresponding with the building of Salisbury cathedral. In a word, this plate, instead

duction of the year 1063!—The fact is, the whole roof of this magnificent structure, from the cupola to the West end, was burnt down in 1569, as Martini informs us, with which date (on repairing the cathedral) the style of the statues, &c. perfectly well agrees.

[y] Archæol. Vol. XV. p. 25.

of proving that the Italians were beforehand with us in pointed architecture, shews how much they were behind us both as to time and execution. Indeed Mr. Smirke himself acknowledges that, " the examples " of the pointed kind are in a more mixed " and unformed character of design in Italy; " a defect that may be ascribed to the aspect " which the face of that country, different " from all others, formerly presented with " regard to more ancient architectural re- " mains." This passage, if I understand it, means that the Italians never excelled in pointed architecture, being attached to the Roman manner, in consequence of the numerous examples of it they had every where before their eyes: an opinion in which the writer perfectly agrees with the ingenious artist [z].

[z] Amongst the several altars and tombs in the pointed style which existed in the Old Vatican, and which are exhibited by Ciampini, being all of them very imperfect and poor, we have selected the tomb raised by Boniface VIII. because the name of the architect and its date, 1290, are ascertained. See Pl. IV. *fig.* XV.

Other systems respecting the origin of pointed architecture, do not seem to affix it to any particular country, and are still more fanciful than those which have been examined. Sir James Hall, Bart. having observed that wands which are bound fast to posts, fixed in the earth, may be so bent and fastened together as to represent cluster columns and tracery vaulting, thinks the idea of pointed architecture was some where or another borrowed from the sight of such basket work[a]! Lord Orford, quoted by Mr. Dallaway, says, that "The "style was first peculiar to shrines, and "then was peculiar to churches[b]." But where did the shrine makers learn it? Mr. Payne Knight makes an absolute medley of the business, pronouncing that, "The "style of architecture, which we call "cathedral or monastic Gothic, is mani-

[a] Essay on the origin and principles of Gothic Architecture, in the Transac. Royal Soc. Edinburgh, Vol. III.

[b] Observations on English Architecture, p. 5.

" festly a corruption of the sacred archi-
" tecture of the Greeks or Romans, by a
" mixture of the Moorish or Saracenesque,
" which is formed out of a combination of
" Egyptian, Persian, and Hindoo [c] !"

[c] Enquiry into the principles of Taste, p. 162.

CHAP. V.

The real origin of the Pointed Style—The occasion, time, and place of its invention.

But why should we wander into every remote country in the known world, and into the regions of fancy, in search of an invention which belongs to our own climate? And for what purpose should we take so much pains to prove a plant to be an imported exotic which we actually see sprouting up and attaining its full growth in our own garden? Let us now go back to the point from which we started, for the purpose of running down the different false systems. We have seen that the greatest people, without dispute, of the eleventh and twelfth centuries, the conquerors of France, England, Italy, Sicily, and of

different countries in the East, namely, the Normans, were possessed of the most ardent passion for ecclesiastical architecture of any nation upon record, and that they vied with each other in the grandeur and beauty of their respective structures. For the former of these effects, grandeur, we observed that they gave to their churches the greatest length and heighth in their power; for the latter, beauty, they enriched them with a variety of architectural ornaments, several of which appear to be of their own invention. The most common of these was the arcade, or series of arches with which some of their buildings [as for example, the outside of St. Osyth's and St. Botolph's conventual churches in Essex[d], and the inside of Durham, on the basement story] were covered over, and which occur more or less on all their cathedral and conventual churches extant. These arcades were diversified many ways, as

[d] See Pl. V. *fig.* 24, 25.

may be particularly seen on the tower of St. Augustine's monastery in Canterbury, built by its first Norman Abbot, Scotlandus, in 1080[e]. One of these varieties consisted in making the semicircular arches (such as all nations, Grecians, Romans, and Saxons, had hitherto built) intersect each other in the middle[f]. The part thus intersected formed a new kind of arch, of more graceful appearance and far better calculated to give an idea of height than the semicircular arch: for every one must be convinced that a pyramid or obelisk,

[e] Chronicon. Will. Thorn apud Twysd. Col. 1789.

[f] There is no proof that Tickencote and other ancient churches on which these intersecting arches appear, were built before the Norman conquest, much less that these ornaments are not a subsequent addition; and there is good reason to judge from William of Malmsbury's account of his own monastery in particular, that the intersecting arches still seen there were made by Abbot Warin de Lira, a Norman, in 1080. It is worthy of observation, that in the famous tapestry of Bayeux, representing the conquest of England, and said to have been wrought by the Conqueror's mother, and engraved by Montfaucon and Ducarel, though several churches, palaces, shrines, and other arched work are seen in it, there is not the least appearance of intersecting arches, much less of a pointed one.

from its aspiring form, appears to be taller than the diameter of a semicircle, when both are of the same measure. These plain and intersecting arcades were sometimes placed in alternate rows, as in Remigius's work on the façade of Lincoln cathedral; and sometimes irregularly intermixed, as on the North side of Durham cathedral. The pointed arch, thus formed, appeared at first a mere ornament in basso relievo, as in the abovementioned instances, but very soon it was also seen in alto relievo, over niches and recesses in the inside of churches, as in the remains of the Cathedral of Canterbury, built by Lanfranc[s], and in the ab-

[s] It appears from Gervase, the monk of this cathedral monastery, that Lanfranc rebuilt the whole of it about the year 1085, and that the fire which took place in the roof of its choir in 1174, did not destroy the whole of the parts adjoining to it. From this circumstance and an examination of the work itself, we may safely pronounce that the recess here spoken of in the wall of the South aisle, adjoining the choir, is a remaining part of the work of Lanfranc. Twysd. Col. 1293. This pointed arch, which accompanies other circular ones of the true Saxon fashion, is represented at Pl. IV. *fig.* XVI. It is copied from Pl. XXXVI. Part I. of Mr. Carter's Ancient Architecture of England.

bey churches of Glastonbury[h] and Rumsey[i]. It is probable that the first open pointed arches, in Europe, were the twenty windows constructed by that great patron of architecture, Henry De Blois[k], brother of King Stephen, and Bishop of Winchester, in the Choir of the church of St. Cross, near that city; which structure he certainly raised be-

[h] Abbot Herlewin, who died in 1120, began to rebuild the whole of Glastonbury Abbey, as Malmsbury informs us, De Antiquit. Glaston. Ecc. Six years after this date, Henry De Blois became Abbot of it. Hence it is not unlikely that the intermixed pointed and circular work exhibited by Mr. Carter, in the above-mentioned plate, were executed under his directions.

[i] The conventual church of Rumsey, first built by Edward the Elder, was rebuilt by King Edgar; but it was so much augmented and ornamented by Bishop De Blois, whose niece Mary, the daughter of King Stephen, became a nun there, that Warton and other writers describe him as the founder of it. The arches here copied from Mr. Carter, were probably made by him very soon after he built St. Cross. Pl. IV. *fig.* XVII. He seems not to have had either the means or the disposition to raise great buildings after the civil war began between his brother Stephen and his cousin, the Empress Maud.

[k] He is described by his contemporary, Giraldus Cambrensis, in his Copula Tergemina, as a prince of the most active and enterprizing mind, particularly in undertaking works of art, which seemed impracticable to other men. See a specimen of the windows in the choir of St. Cross, Pl. IV. *Fig.* XVIII.

tween the years 1132 and 1136[1]. These consist of openings, made in the intersected parts of semicircular arches, which cross each other. The ocular evidence of this, taken along with the ascertained date of the work, is a sufficient proof that, to the accidental Norman ornament of intersecting arcades, we are indebted for the invention of pointed arches, and pointed architecture. If any man chooses to dispute the proof, he cannot at least deny the fact, that open pointed arches, to the number of twenty, were seen together under intersecting arches, in an English church, between the years 1132 and 1136. As the above mentioned prelate

[1] Godwin De Præsul. Angl. says, that he built St. Cross in 1132, Bishop Lowth, who had examined the archives of this foundation, says in 1136. Probably the choir, which is evidently the older part, and all that was requisite for the use of the original establishment, was begun in the former year, and finished in the latter. The date of 1136 agrees with the testimony of Rudborne, the Monk of Winchester, in his Historia Major, who says, "Hoc "anno, (1136) Henricus Wyntoniensis Episcopus incœpit facere "domos de Wulvesey et alias in maneriis pertinentibus ad episco- "patum Wintoniæ, et similiter Hospitale Sanctæ Crucis juxta "Wyntoniam." See the Author's Histor. Survey, p. 160. Second Edit. See also Appendix O.

proceeded in his building, from the East, or choir end, (which on all such occasions was first erected, and rendered fit for divine service[m]) to the transept, the tower, and the nave of the church, he made many other pointed arches, some of them obtusely[n], others acutely pointed[o]; intermixed, however, with a still greater proportion of circular and other Saxon work. In 1138, he built the Castle of Farnham[p], where his pointed arches, resting on huge Saxon columns, are still to be seen[q].

Nor was the pointed arch during the reign in question, that of King Stephen, confined to the works of his brother, Henry Bishop of

[m] This is agreeable to the remark of Mr. Bentham, in his History of Ely.

[n] Pl. IV. Fig. XIX. [o] Pl. V. Fig. XX.

[p] "Anno 1138, fecit Henricus Episcopus ædificare domum quasi "palatium, cum turri fortissima in Wintonia, Castellum de Mer-"dona et de *Fernham*, &c." Annales Ecc. Wint. Auctore Monacho Winton. Angl. Sac. T. I. p. 299.

[q] These very interesting remains were first noticed by that indefatigable antiquary, Mr. Carter, and are represented by him, in his Ancient Architecture, Part. I. Plate 65. They are copied in our Pl. V. Fig. XXI.

Winchester; for Roger de Clinton, Bishop of Chester and Litchfield, introduced it into the church of the latter city, the greater part of which he rebuilt, and also into the abbey of his foundation at Bildwas, on the banks of the Severn, in Colebrook Dale. In the ruins of this interesting monastery, which was built between the years 1136 and 1139[r], as also in those of Lanthony Abbey, Gloucester, built at the same period, we see the lancet point in all the arches of the nave, under round headed Saxon windows, intermixed with the chevron billet, and other characteristics of Saxon Architecture.

If we may give implicit credit to the drawings and the authorities of Grose, the Scotch were not long in adopting the new

[r] Richardson, apud Godwin, assigns this year, quoting the Monasticon. Dugdale himself, Vol. III. p. 779. cites both the annals of St. Werburg, and those of Peterborough [Bib Cot,] for the year 1136, as that of the foundation. Probably the building was begun in the one, and finished in the other. The Abbey of St. Mary, near Dublin, was made a cell to Bildwas, by authority of Henry II. The remains of Bildwas very much resemble those of Lanthony Abbey, Gloucester; which, as appears from Dugdale's evidences, was founded in 1136. See the latter in Pl. V. Fig. XXII.

style of the English, which was probably introduced amongst them by David, their King, who came into England to command the army of his niece, the Empress Maud, against King Stephen. Thus much is certain, that Kelso Abbey, founded by him before he came into this country, namely in 1128, affords no specimen of the pointed arch, whilst other abbeys and churches in Scotland, built soon after his return home, present much the same mixture of round and pointed arches, as occurs in all the sacred edifices of that period in England.

A late writer, whose professed object was to transfer the palm of pointed architecture from the English, and Norman English, to the French, [which palm the French themselves are in the habit of attributing to our countrymen[s]] asserts that the pointed arch

[s] Historical Survey of Ecclesiastical Antiquities in France, by the Rev. G. D. Whittington. The received tradition, throughout all the northern provinces of France, is, that almost all their grand churches were built by the English. This testimony of the author is confirmed by Major Anderson, who surveyed these provinces with the eye of an antiquary, in 1801, and who mentions the churches

was adopted in the Abbey church of St. Denis, near Paris[t], begun in 1137, and finished in 1144, before any instance of it occurred in England. But this we have proved to be a palpable error, by the works and dates referred to above. In the second place, the writer admits, that this very church of St. Denis, was rebuilt from the ground, in 1231; and though he says, that

of Notre Dame, Amiens, Beauvais, Rouen, and St. Nicaise, as being attributed to English architects. This proves, at least, the high reputation in which English architects were held in France, at the time of the introduction of pointed architecture.

[t] This writer describes the apsis, or circular part, at the East end of the Abbey church of St. Germain at Paris, as consisting of pointed arches; which, he says, were adopted from "accident "and necessity." p. 87. This is giving up his system, as to their Eastern origin. Again, this alledged necessity is a mere imagination, as will be seen in the circular arches in the apsis of the chapel of the Tower, built by Gundulphus, before 1100. The writer mentions this church of St. Germain, as having been "finished, nearly as it exists now, before 1014;" and yet he says, "it was not dedicated till 1163." It is evident that he has either mistaken the sense of his French authors, or that they themselves were not entitled to credit. Would the monks of that abbey forego the use of their finished church, during 150 years, or perform divine service in one not dedicated, when their own, or any other bishop, could have performed this ceremony, as well as the Pope himself?

some portions of the old building were preserved, it is plain he is unable to ascertain which these are. Thirdly, in the painted windows of this church, as represented by the learned Mountfaucon, who says they were executed under the directions of Abbot Suger, in 1140[u], we have a continued series of the first crusade, in which a great number of arches are seen: but, in none of them is there the least appearance of the point. This is a double-edged sword against the writer's system. It proves that the painter was equally unacquainted with the pretended Eastern origin of the pointed arch, and with its alleged adoption in the church he was then ornamenting. Lastly, the many instances of mistake and prejudice, which occur in the posthumous work

[u] See Plate L. with the four following ones, and Montfaucon's explanation of them, in his Antiquities of the French Monarchy.

under consideration, prove the writer's haste and want of reflection, when he wrote it.[x].

[x] Amongst the instances of the writer's prejudice may be placed his denial of the existence of St. *Genevieve,* whose "name," he says, "is, probably, a corruption of *Janua Nova.*" This etymology reminds us of Swift's derivation of *Peloponnesus,* from *Pail-up-and-ease-us.* St. Genevieve's name was well known in the East, as well as in the West, during her life-time; and frequently occurs in the life of her cotemporary, the celebrated St. Germain, Bishop of Auxerre, written by Constantius; who, as well as the writer, lived at the same time with her. It occurs likewise in all the original histories we have of Clovis, King of France. A chapel of wood was built over her tomb, soon after her death, about the year 512; and in the following century, the famous St. Eloy made a costly shrine for her remains.

CHAP. VI.

Progress of the Discovery—Formation of the First Order of this Style.—Description of the East End of Canterbury Cathedral.

To return now to the subject of intersecting arches; these were sometimes plain semicircles crossing each other, as on the South transept of Walkelyn's church at Winchester[a], and on the façade of St. Botolph's church, Colchester[b], in which they form a mere pointed arch, or else they were intersecting semicircles resting upon pillars, with a capital, or at least an abacus, by way of an impost, as on the North transept of Durham[c], the façade of Lin-

[a] See Pl. V. *fig.* XXIII. [b] See Pl. V. *fig.* XXIV.
[c] See Pl. V. *fig.* XXV.

cohn, &c. In the latter case they present the appearance of a pointed arch, with the lateral points or *cusps*, as Sir James Hall has very aptly called them[d]. This ornament, during a considerable time, was only used occasionally, but, in the end, its use became universal. The addition of another cusp on each side of the pointed arch, turned its trefoil head into a cinquefoil. In like manner, four cusps being introduced into that circle or Oeil de Bœuf, which the Saxon, as well as the ancient Roman and Greek architects, had been accustomed to place in the tympanum of their pediments, formed a quatrefoil rose or cross. By an additional number of cusps, Catharine-wheel or marygold windows were easily produced. But these did not make their appearance till the beginning of the thirteenth century. During the latter part of the twelfth, a strange mixture of styles

[d] Essay on the Origin of Gothic Architecture. See Transac. Edinburgh. Philos. Soc.

prevailed in the numerous ecclesiastical buildings which were then going forward, as might be expected when an old style began to be exploded and a new one was in the act of formation. This would not have been the case had the latter been copied from established models in Syria, Arabia, Egypt, Spain, or elsewhere. Pointed arches were every where intermixed with circular ones[e]. The former were more generally placed upon massive Saxon pillars, and were, in some few instances at first, very obtuse, as in the intercolumniations at St. Cross[f], or what was almost always the case, they were exceedingly acute, as in those of the neighbouring church of St.

[e] A great number of these architectural varieties and intermixtures are exhibited by Mr. Carter in his rich treasury of architectual antiquities cited above. See Plates XXXVI. and XXXVII. &c. Most of these he demonstrates to have been originally so constructed, having been occasioned by what he calls the struggle between the circular and pointed styles.

[f] See Pl. IV. *fig.* XIX.

Mary Magdalen on the Hill, raised about the year 1174[z].

It is matter of evidence that the pointed arch was used in England a considerable time before any other member which is now considered as belonging to the pointed style. It could not, however, long escape the observation of our ingenious architects, that the ponderous circular pillar ill accorded with the light and aspiring pointed arch. Accordingly, towards the close of the century in question, the Saxon column, in some instances, began to be shaped into the form of the Arabic figure 8, so as to retain its former strength and yet to appear gracefully slender; and where columns were used for decoration rather than for strength,

z See Pl. VI. *fig.* XXVIII. Mr. Whittington maintains that "the slender proportions" of the style in question, by which we presume he means cluster columns, pinnacles, &c. were borrowed from the East, together with pointed arches; and yet it is demonstrated that the former did not appear in England or France till a considerable time after the latter, and that they made their way by slow degrees. See the foregoing figures.

as to support ornamental arcades and the architraves of windows, very thin ones, and those, for the most part of Purbec marble, were adopted. We have a striking example of these and other improvements in the pointed style before our eyes at the East end of Canterbury cathedral, which was rebuilt between the years 1175 and 1180, under the direction of William of Sens, and of another architect of the name of William. It is an incomparable advantage for forming a right idea of the rise of pointed architecture in this country, that we are possessed of an accurate comparison, made by an intelligent eye-witness, Gervase, a monk of this cathedral, between the choir part of the church built by Lanfranc, who was an architect as well as a prelate, about the year 1085 (and which was burnt down in the year 1174) and the said choir part rebuilt by the two abovementioned architects at the distance of about 90 years afterwards [h]. The

[h] Appendix P.

most remarkable things which he mentions are these: that the pillars of the new choir were of the same form and thickness[i] with those of the old choir, but that they were 12 feet longer; that the former capitals were plain, while the latter were delicately carved; that there were no marble columns in Lanfranc's work, but an incredible number in that which succeeded it; that the stones which formed the ancient arches were cut with an axe, but those of the new arches with a chissel; that the vaulting of the side aisles of the choir was formerly plain, but now pointed with key-stones[k]; that the old

[i] He speaks of them as they appear to the eye, namely round, in contradistinction to the square and hexagon piers, which were common in Saxon and Norman churches.

[k] "Arcuatæ & elavatæ." In a former passage he had said: "Clavem pono pro toto ciborio; eo quod clavis in medio posita "partes undequaque venientes claudere et confirmare videtur." Fol. 1298. From this account of the key-stone or boss, which, in forming a pointed groin is the support of all the others, and requires to be made of a particular shape, it is plain that the author speaks of pointed vaulting. It is unaccountable that our great architect should assert, as he does in his Parentalia, p. 297, speaking of the supposed authors of pointed architecture, that "Their arches were pointed *without key-stones*, which they "thought too heavy."

choir was covered with a flat ceiling, ornamentally painted [l], while the new one was elegantly arched, with hard stone for the ribs and light toph stone for the interstices; finally, that there was only one *triforium* or gallery round the ancient choir, while there were two round the modern one. The present state of the East end of Canterbury cathedral still corresponds with the account of Gervase, written above 600 years ago, and is faithfully exhibited by Mr. Carter, from whose plate, with his permission, we shall borrow a copy of it[m]. We still see large well proportioned columns, which appear round to the spectator, when in a proper position, crowned with elegant capitals, nearly of the Corinthian order. Upon the abacus of these capitals rest the bases of slender marble columns, which mix

[l] This is the actual state of the grand abbatial church of St. Albans, and of other ancient churches.

[m] See Pl. VI. *fig.* XXVII. See also an interior view of this portion of Canterbury Cathedral, as it still subsists, Plate VIII.

their heads with those of other marble columns supporting the arches of the principal triforium. From these united capitals branch out triple clusters, which, at a proper height, form themselves into ribs to sustain the groining. The arches on both the upper stories and in the groining are highly pointed[n], as are those also on the basement story, which latter sweep round the Eastern extremity to form the concha or apsis; in short, twenty years before the close of the twelfth century, there was not a member of Saxon architecture to be seen in the whole chancel and choir of the church of Canterbury, except the main arches of the basement story,

[n] It is, however, worthy of remark, that the arches on the upper story alternately take the horse-shoe sweep, embracing more than half a circle. The same is the case with the ribs which support the groining. This form of arch occurs also in the church of Rumsey, the porch of St. Cross, in a side chapel now used as a work shop, in the North transept of Winchester cathedral, &c. The Moors of Spain having late in the thirteenth century acquired some knowledge of pointed architecture, probably from France, parts of which they overran, were particularly fond of the horse-shoe arch. Swinburn discovered upon the Alahambra the date, if I mistake not, of 1276.

which were probably so constructed from an idea of their being firmer than pointed ones, and certain billet-blockings and mouldings, which themselves gave place as the work advanced upwards to what may be called the *quatrefoil moulding*. This moulding, thus introduced, soon became universal, and is a sure criterion of the first order of pointed architecture in its more perfect state[o].

The style adopted in the first metropolitical church of this kingdom, was followed in the suffragan cathedrals as soon as any of them stood in need of rebuilding or repairing. Lincoln led the way about the year 1195, under the directions of the illustrious St. Hugh, who undertook to rebuild the whole of this vast cathedral, and who was so intent upon the work, that he carried stones and mortar on his own shoulder for the use of the masons[p]. The church was

[o] See pl. V *fig.* XXVI. copied from Mr. Halfpenny's pl. 74, of Gothic Ornaments in York Minster. The original is in the West aisle of the North transept, erected early in the thirteenth century.

[p] Mat. Paris ad An. 1200.

so far advanced by him at the time of his death, which happened in 1200, that he is considered as its principal builder, though we know that its nave was not finished till about fifty years afterwards, in the episcopacy of Robert Grostete. Except the West front, which is almost all the original work of the Norman prelate Remigius, and except the groins, skreens, and certain other interior decorations, it is all in the simple style of the first or lancet order of pointed architecture, but magnificent and beautiful beyond the conception of those who have not seen it[q]. The rich and pow-

[q] Beverley Minster is for the most part in the same style, and probably of the same date with Lincoln. It is hardly inferior to it, except in its dimensions. The Western and Eastern façades, however, are in a later style. Worcester cathedral, having been defaced with fire in 1202, was restored in the course of sixteen years afterwards, being dedicated in 1218.—Annales Wigorn, ad dict. An. Its choir is decorated in the same magnificent and striking style as that of Lincoln. The triforia or galleries, and other inside work of Litchfield cathedral, are in the same rich manner. This and the windows of the nave are certainly not the work of Bishop De Clinton, in the reign of Henry I. as is generally believed; but rather of Alexander de Stavenby, who was consecrated in 1224, and who is recorded for having done great

erful Bishop of Winchester, Godfrey de Lucy, undertook in 1202 to do the same at his church that had been done at Canterbury, namely, to rebuild the East end of it in the new invented style. His extensive work still remains, and is remarkable for its long narrow arches, pointed like a lancet, its slender detached pillars of Purbec or Petworth marble, its quatrefoil mouldings, and light, though simple, groining. And whereas it was usual, for the sake of ornament and also of use, when a window was wanted, to place two of these narrow arches together under one larger arch, and being thus placed, there occurred a vacant space between their heads, a trefoil, quatrefoil, or cinquefoil was, about this period, gracefully introduced to fill it

things for his church (De Successione Epic. Lichf. Thom. Chesterfeld. Angl. Sac.) and of his other near successors, to one of whom Henry III. gave a licence for taking stone from the forest of Hopwas, "Pro nova fabrica Ecclesiæ." See Shaw's Staffordshire, &c. The Lady Chapel, and the groining of the whole cathedral, was the work of Bishop Langton, about the year 1320.

up[r]. In 1227, Archbishop Walter de Grey undertook to rebuild the Northern metropolitical church, that of York, beginning with the South cross aisle, which exhibits all the abovementioned characters[s]. The same work was going on at this time at Worcester, Salisbury, and other great churches. The latter, which was a new foundation, begun by Bishop Poore in 1220[t] and finished by Bishop Bridport in 1258, exhibits in its front and other parts the double lancet arch, with the intermediate rose between their heads and the other abovementioned characters[u]. Finding it, however, necessary to place three lancet

[r] See an outside view of De Lucy's arches at the East end of Winchester cathedral, pl. VII, *fig.* XXXII. Also at pl. VII *fig.* XXXI. an inside view of the same, shewing the slender detached Purbec pillars, the simple groining, the quatrefoils inserted between the cuspated heads of the pillars, &c. being all of the date of 1202.

[s] See the triforia or galleries, built by Archbishop de Grey, in Mr. Halfpenny's Views, plate 78.

[t] Bishop Poore being translated to Durham, began to ornament the East end of the cathedral there, namely, the nine altars, &c. in the same style with his works at Salisbury.

[u] See pl VI. *fig.* XXIX copied from the façade of Salisbury cathedral.

windows together in the upper story of his church, he raised the middle one considerably higher than the others, an improvement which was adopted in many other churches at this period. A still more important improvement of his was the raising of the cornice or canopy to a considerable height above the arches; which cornice had hitherto stuck fast to the architrave. It terminated, indeed, in a trefoil or other flower, but was not furnished with crockets or other rich decorations[x]. At the time when the work at Salisbury was drawing towards a conclusion, that at Westminster Abbey was beginning, namely, in 1245. The North transept and part of the adjoining work remain in much the same fashion of architecture they were left in by their founder, Henry III[y]. The windows

[x] Pl. VI. *Fig.* XXX. copied from the same. It must be added, that the cornice at this time seldom descended so low as the impost of the arch, and commonly rested on a scroll, mask, or other simple ornament by way of bracket. See *fig.* XXVI.

[y] Mr. Carter shews that the great Catharine wheel window of the transept has been enlarged to its present dimensions at a subsequent period.

of the side aisle and upper story are larger and better proportioned, and the work in general is more perfect than had hitherto been witnessed. These windows adopt the cinquefoil in their heads, and those which light the triforium externally, consist of a triple cinquefoil under a pointed arch, thus furnishing beautiful models which were imitated in the heads of windows during a long time afterwards. The arches and windows of the transept being placed in regular rows above and near each other, present the idea of those immense mullioned windows, which afterwards came into fashion. Here also, namely, in the inside of the transept, we find statues of tolerable good workmanship: and on the outside we observe niches with pedestals and plain canopies.

CHAP. VII.

Formation of the Second Order.—This the perfection of the Style, —Description of its Characteristical Members.

During the reign of our first Edward, which commenced in 1272, the architecture of this country, through the genius, industry, and piety of its architects, and artists, acquired a new character, or rather tranformed itself into a new order of the pointed style. The first feature of this was the general adoption of the well proportioned and well formed aspiring arch. The pointed arches, which had hitherto been constructed, though sometimes accidentally graceful and perfect, were almost always too narrow, too sharp in the point, and ungrace-

fully turned, as appears, amongst other instances, in the windows of the nave of Worcester, and in the old parts of Litchfield Cathedral. But those of the present period were universally well turned, and duly proportioned[a]. They were also invariably adorned, with one or more cusps, on each side of the head; so as to form trefoils, cinquefoils, &c. as also with new invented and highly finished mouldings. The pediments raised over these, and other arches, were universally purfled, that is to say, adorned with the representation of foliage along the jambs, called crockets[b]. Pinnacles, which had hitherto been rare and and quite plain, were now placed at the sides of almost every arch, and on the top of every buttress, being invariably purfled and

[a] The best proportion of the head of a pointed arch, is allowed to be when an equilateral triangle can be inscribed within its crown, and its imposts or springing.

[b] These terminations of the canopy, pediment, or sweeping cornice, as Mr. Carter terms it, were now made to descend as low as the springing of the arch, and rested on the busts of Bishops, Kings, or other founders, or benefactors of the building.

surmounted with an elegant flower, called a finial. A pinnacle of a larger size, being placed on the square tower of former times, as was the case at Salisbury, and elsewhere, became a broach or spire. Nay, so fond were the people of this novel ornament, that we read of a new built tower being taken down, because it was not fit to sustain one; when another tower, with a spire to it, was built, equal in height with the whole length of the church[c]. That bold feature of this style the flying buttress, for supporting the upper walls of the nave, which had hitherto, for the most part, been concealed in the roof of the side aisles, was now brought to view with suitable dressings, as an ornament. The window no longer consisted of an arch divided by a mullion into two, and surmounted with a single or triple circle, or quatrefoil, but was now portioned out by

[c] Du Fresne, Article Turrile. N. B. We read of a steeple upon the top of St. Paul's, London, early in this century, but we may be sure it was such a small plain obelisk, as those we see on the façade of Salisbury.

mullions and transoms, or cross bars, into four, five, six, and sometimes into nine bays, or days, as the separate lights of a window were called; and their heads were diversified by tracery work into a variety of architectural designs, and particularly into the form of flowers. The circumstance, which had favoured the introduction of large West windows, was the abrogation of canonical penances, in consequence of the frequent crusades, which, in its consequence rendered the Galilee, or penitential porch at that end of the church unnecessary[d]. The plain niches of the 13th century, early in the 14th became

[d] There were formerly such porches at the Western extremity of all large churches. In these public penitents were stationed; dead bodies were sometimes deposited, previously to their interment, and females were allowed to see the monks of the convent, who were their relatives. We may gather from a passage in Gervase, that, upon a woman's applying for leave to see a monk, her relation, she was answered, in the words of scripture: "He goeth "before you into Galilee, there you shall see him." Hence the term *Galilee*, which is still retained for the Western porches of Durham and Ely Cathedrals, and which has puzzled all antiquaries. It is well known that at Durham Cathedral, women were not even allowed to attend divine service, except in the Galilee.

gorgeous tabernacles, in which as much architectural skill and industry was often bestowed, as in building the whole church. These tabernacles, as well as various other parts of the sacred edifice, were filled with statuary, which frequently exhibited equal spirit in the design, and art in the execution[e]. Finally the ribs, supporting the groined ceilings, were no longer simple intersecting arches, but they branched out in tracery work of various devices, still more rich and elegant than that in the large windows; and wherever these ribs met, they were tied together by an architectural knot, called a boss, or orb, which generally exhibited some instructive device[f].

[e] This will be acknowledged by every person of taste, who looks into Mr Halfpenny's work, representing the decorations of York Minster, executed early in the 14th century.

[f] It is proper to observe that the pediments, or canopies, which during the reign of the two first Edwards, and the early part of Edward IIId's. reign, rose straight upwards, like the sides of an equilateral triangle, as has been seen in *fig.* XXX, towards the latter end of the reign of Edward III, began to humour the sweeping curve of the arches they covered, which reduced their excessive height, and added to their gracefulness. See pl. VII, *fig.* XXXIII. copied from Winchester College Tower.

We have proofs of these improvements, or rather of this new order of pointed architecture, in the three remaining grand crosses erected in memory of Eleanor, wife of Edward I. at Northampton, Geddington, and Waltham. She died in 1290. We have other proofs in the magnificent tomb in Westminster Abbey, of Edmund Crouchback, brother of King Edward I. who died in 1296. But the most perfect specimen of the whole detail of these improvements is to be met with in York Minster, the nave of which was built between the years 1290 and 1330, and the choir some thirty years afterwards. If any similar erection, on a smaller scale, could, in its time, have vied with this in beauty and grandeur, it was St. Stephen's chapel, Westminster, which was begun by Edward III. in 1348. But of the inimitable beauties of this chapel, only a few scattered vestiges remain[g]. There are few indeed, if any, of

[g] See the plans, elevations, &c. of this chapel, now the House of Commons, published by the Society of Antiquaries from Mr. Carter's drawings.

our cathedrals which were not rebuilt or repaired in some or other of their parts in the new improved manner. Before 1321 Bishop Langton had added the Lady chapel to his Cathedral of Litchfield, had groined the whole, and had erected the beautiful Western façade[h]. About the same time the chief part of the nave of Westminster Abbey was in building. Between the years 1327 and 1370, Exeter cathedral was groined, and its heavy Norman work changed into the light and elegant pointed architecture of that period, by its munificent Prelate, Grandison[i]. During the Pontificate of Courtney, which commenced in 1381, and that of his successor Arundel, the nave of Canterbury cathedral was rebuilt[k]. About the same period that great prelate and architect, Bishop William de Wykeham, was employed in performing the

[h] Thomas de Chesterfield Angl. Sacr. et Godwin de Præsul.

[i] Godwin de Præsul.

[k] Idem.

same difficult work in Winchester cathedral, which had taken place in that of Exeter and others. It has been generally said[1] that Wykeham took down the nave of his church, which had been erected by his Norman predecessor, Walkelin, in order to build that which exists at present, and few persons can understand how the clumsy circular architecture of the eleventh century could be altered into the elegant pointed style of the fourteenth; but, to convince themselves of the possibility of this, they have but to ascend into the roofs of the side aisles and nave of the last mentioned church. Indeed, without such climbing, they may see this demonstrated at the West end of Gloucester, St. Albans, and Rumsey great churches, where two or three of the plain circular Saxon pillars have been cased with mouldings, so as to appear cluster columns, and where the

[1] Bishop Lowth in his Life of W. of Wykeham, the Rev. Thomas Warton in his Survey of Winchester, &c.

naked round arches have been shaped into elegant pointed ones, while the rest of the columns and arches to the Eastward are left in their original state. The taste for improvement descended to the parish churches, in which though means should have been wanting for making any other alterations, yet the windows, at least of almost all of them, were changed by some benefactor or another into those of the pointed style. Hence it is not uncommon to see figures of knights or ladies presenting windows of this form in the painted glass of such churches[m].

[m] There are representations of such in Dugdale's Warwickshire, in Montfaucon's Antiquities of the French Monarchy, &c. In the last mentioned work we see, in Plate XCIII. the figure of Lewis Count of Evreux, son of the French King, presenting a window to the principal church of that city. It is a very poor specimen of architecture for the beginning of the fourteenth century, with which this offering corresponds.

CHAP. VIII.

Depression of the Pointed Arch—The Third Order of the Pointed Style—Description of it—Cause of the Decline of Pointed Architecture.

It is the condition of all mortal things to be subject to change; hence human arts, like the human body, when they have attained their perfection, tend towards a decline. This was the case with that singular invention of human genius and piety, pointed architecture. Its rise, progress, and decline, occupy little more than four centuries in the chronology of the world. As its characteristical perfection consisted in the due elevation of the arch; so its decline commenced by an undue depression of it. This took place in the latter part

of the fifteenth century, and is to be seen, amongst other instances, in parts of St. George's chapel, Windsor, built by Edward IV[n]. in King's College chapel, Cambridge, and in the chapel of Henry VII. Westminster. It is undoubtedly true, that the architects of these splendid and justly admired erections, Bishop Cloose, Sir Reginald de Bray, &c. displayed more art and more professional science than their predecessors had done; but they did this at the expence of the characteristical excellence of the style itself which they built in. They consulted more their own reputation than the proper effect of their works. The spectator, in viewing these, was amazed at the sight of huge masses of stone, of more than a ton weight, called pendent capitals, hanging in the air, which, instead of supporting the vast groins in which they

[n] This monarch died in 1483. We have selected the arch over his tomb in St. George's chapel, Windsor, as a specimen of the arch in question. Pl. VII. *Fig.* XXXIV.

are fixed, are supported by them. But this taste betrayed a disregard for the aspiring arch, the curvature of which was henceforward discernible at its springing, rather than at its point. Finally, ingenuity more than sublimity was now affected, and curiosity more than devotion gratified. Thus the Royal chapels and mortuary oratories, built in the reigns of the two last Henrys, are seen covered over with tracery and other carvings of the most exquisite design and execution, but which fatigue the eye and cloy the mind by their redundancy. Hence the judicious critic, after admiring their ingenuity, fails not to sigh for the chaste grandeur of York Minster, or even for the unadorned majesty of Salisbury cathedral, instead of them. The windows of this period were so enlarged, multiplied, and brought down so low, as to give the whole sacred edifice the appearance of a glass lanthorn. This, amongst other instances, is exemplified in the Lady chapel of Glouces-

ter Abbey, which was built towards the close of the fifteenth century. The mullions were multiplied proportionably to the size of the windows, in such manner that frequently the eye cannot discover any regular figure or design in them. The tracery of the vaulting corresponded with that of the windows. The ribs, whose office it is to support the groins, were ramified into fibres; but, in return, they were loaded at the knots with such numerous and disproportioned heavy armorial bearings, badges, rebuses, and other similar ornaments, as to draw down the low arches still nearer to the eye, and to give them an appearance of heaviness very remote from the due effect of the pointed arch . The

° It is to be understood, however, that these observations do not apply to all the pointed architecture of the æra in question. Bishop Oliver King, for example, about the year 1500, erected the grand church at Bath, in a very chaste and in some respects too plain a manner; for he contented himself with coving the nave instead of groining it. In 1525, Bisop Fox rebuilt and ornamented the chancel of Winchester cathedral with the same good taste, except as far as regards the substituting of canopies over the towers instead of pinnacles, and loading the groins with numberless heavy devices.

same depression of the arch, which characterizes the inside of the sacred buildings of this period, appears also on the outside of them. Instead of the aspiring pinnacles and spires of the preceding æra, the towers now built were covered with hemispherical cupolas, and the portals of this period, though still slightly pointed, instead of being surmounted with crocketed canopies and purfled side buttresses, were enclosed in large square architraves, the chief ornaments of which were inscribed in the spandrels[p]. In short, the downfal of pointed architecture in this kingdom, as its established style for ecclesiastical purposes, was inevitable from a variety of causes, but chiefly from a falling off from its primary character, the sublime, which was the necessary consequence of the depression of its aspiring arch. The ruin was complete when Edward VI. mounted the throne in the mid-

[p] See the arch over the tomb of Edward IV. in the *Fig.* above referred to.

dle of the sixteenth century. Then began a truly Gothic, or at least a barbaric style, consisting of irregular and ill-executed Grecian members, with intermixed globes, triangles, frets, pyramids, obelisks, and other absurd devices, as may be seen on all the ornamental tombs and other works executed in England, between the close of the reign of the last Henry and the early part of the reign of the first Charles, by whose taste and munificence, and the genius of Inigo Jones, true Grecian architecture was introduced into this island.

CHAP. IX.

Description of the Three Orders—Periods of their respective duration—Churches, &c. which belong to each of them.

From what has been said it will appear that there are three orders of the pointed style, corresponding with the different periods in which they prevailed, each one of which has its proper character and members[q] as much as the five orders of the Grecian style have theirs[r]. It is for professional men, such as the author of the Ancient Architecture of England, who has spent his life in bisecting our cathedrals, longitudinally and

[q] It is a mistake in Mr. Payne Knight to assert, as he does in his Inquiry, p. 159, that "If we ask what is meant by pure "Gothic, we can receive no satisfactory answer, as there are no "rules, no proportions, and consequently no definitions of it."

[r] Batty Langley attempts to make out five orders of what he calls Gothic Architecture, to correspond, in number, with the Grecian orders. But it is to be observed, that this miserable architect invents all his orders: they are none of them conformable to original works in the pointed style. Such, however, as they are, they have served to mislead this nation into a preposterous

latitudinally[s], and in copying them, from their grand proportions down to their minutest decorations,[t] to enter into the detail of these with both his pencil and his pen. The chief rule he will have to follow in the performance of the task here pointed out, is that which the writer has scrupulously adhered to in the course of this treatise, namely, to select such architectural specimens[u] for his authorities, as can be demonstrated to belong to the periods and orders

species of architecture, very prevalent in the villas round the metropolis, called the Gothic, but which ought be called the fantastic style.

[s] See that splendid work, which does so much honour to our nation, published by the Society of Antiquaries, Plans, Elevations, and Sections of St. Stephen's chapel, and of Exeter, Bath, Durham, and Gloucester cathedrals, engraved by Mr. Basire, from the drawings of Mr. Carter.

[t] See Mr. Carter's Specimens of Ancient Sculpture, likewise his Ancient Architecture of England. In the latter work he is laying the foundations and furnishing the materials for the regular system here suggested.

[u] A great variety of examples, accurately drawn, and elegantly engraved, will be found in "*The Architectural Antiquities of Great Britain,*" of which 2 vols. in quarto, are already published, and which with the accompanying documents would be of the greatest use to the scientific architect who should undertake the important task here pointed out.

in which he places them. That this task has not yet been performed is no proof that it cannot be performed. Grecian architecture was long practised before the rules of it were laid down, or the proportions of it discovered. With respect to the present writer it is sufficient for him to refer to the proofs which he has adduced, that the pointed style of architecture in this country can be traced up to the reign of Henry I. in 1132, or, at the latest, to the beginning of the reign of Stephen, in 1136, and that its First Order, that of the acute arch, was perfected before the conclusion of the twelfth century, and that this order continued till near the conclusion of the thirteenth century; that its Second Order, that of the perfect or equilateral arch[x], reigned from that period till after the middle of the fifteenth century; and

[x] It is not meant that all the arches of the second order are of the proportion in question; it is sufficient that they come near to it, and are all elegantly turned.

that the Third Order, that of the obtuse arch, obtained from this time down to the middle of the sixteenth century, when the style itself was exploded, and a great proportion of the most beautiful specimens of it were destroyed. We have also remarked that the First Order is characterized during its formation, that is to say, till near the latter part of the twelfth century, chiefly by its acute arch (its pillars and other members being frequently Saxon,) but after its formation, not only by the narrowness and acuteness of its arch, but also by its detached slender shafts, its groining of simple intersecting ribs, its plain pediments without crockets or side pinnacles, and its windows, which are either destitute of mullions or have only a simple bisecting mullion, with a single or a triple trefoil, quatrefoil, or other flower, in the head of them. Of this order are the East end of Canterbury, the West end of Lincoln, and the whole of Salisbury Cathedrals, besides

the transepts of York Minster and of Westminster Abbey. The Second Order is marked, not only by the due proportion and the fine turn of its arch, but also by the cluster columns being, for the most part, formed out of one and the same stone, for the sake of combining strength with lightness, by the elegant, but not overcrowded tracery of its windows and groining, by its crocketed pinnacles, tabernacles, and pediments, the latter of which, towards the conclusion of the fourteenth century, were made to humour the sweeping of the arch which they covered. To this order belong the nave of Westminster Abbey, the nave and choir of York Minster, the naves of Winchester, Exeter, and Canterbury cathedrals, Wykeham's two colleges, St. Stephen's chapel, &c. The Third Order is known, not only by the flatness of the point of its arch, but also by its numerous, large, and low descending windows, together with the multiplicity and intricacy of its tracery,

by its pendent capitals, by the profusion of its ornaments on the walls, both exteriorly and interiorly, by its fan work and countless shields and devices on the ceilings. To this order belong King's College chapel, the chapel of Henry VII. those of Prince Arthur, at Worcester, of Cardinal Beaufort and the Bishops Waynflete and Fox, at Winchester, &c. It will be readily gathered from the whole of this treatise which of the three orders the author himself prefers for religious structures, as best calculated to produce the proper effect of the style[y]; though, doubtless, the impracticability of raising a lofty arch, from want of strength in the supporters or other causes, may sometimes render the obtuse arch preferable upon the whole, especially for small chapels. But which ever order of the pointed style is adopted, good taste as strictly requires that their respective members and ornaments should not be blended together, as that

[y] See Appendix Q.

Grecian and pointed architecture should not be intermixed in the same work[z].

[z] This want of taste is conspicuous in the alterations which have been made of late years in Salisbury cathedral, where the ornaments of the demolished Beauchamp chapel, being of the third order of pointed architecture, are employed to decorate the chaste and uniform work, in the first order, of the illustrious Prelate who founded the cathedral and city of Sarum, Richard de Poore. See the Author's "Dissertation on the Modern Style of altering Ancient Cathedrals."

APPENDIX.

[A] It is so called in the account of the Cathedral of Durham, published by the Society of Antiquaries, which accompanies their magnificent and beautiful plates of that church, engraved by Mr. Basire, from Mr. Carter's drawings. The appellation of English Architecture has drawn forth certain criticisms on the part of Mr. Whittington and others; but if these writers even had succeeded in proving that the pointed style did not begin in England, as certainly they have not, still, arguing by analogy, there would be no impropriety in the term. When we speak of the antiquities discovered at Bath, and exhibited and explained by Sir Henry Englefield, Archaeolog. Vol. X. we call them Roman, not that the style of them was invented at Rome, for they are in the Corinthian order, but because they were erected during the Roman dynasty in Britain. In like manner we call those Saxon remains,

which we believe to have been erected during the Heptarchy, not that the Saxons invented the manner of building them, for we know the Saxons were taught to build by the Romans of their age. Why then may not that be called English Architecture which began to prevail when the nation became properly denominated English?

[B] The lower porch, however, which was the place for penitents, was shut up interiorly, and thus formed part of the open cloyster, that was generally in front of the primitive churches. Mr. Whittington, in his late work, supports an opinion that "the Basilicæ, erected "by Constantine, like the buildings from which they "were copied, were open at the sides." Hist. Survey, p. 3. This observation rests upon no other ground than an observation of Ciampini, that in the Sessorian Basilic, now the church of the Holy Cross at Rome, the arcades which were heretofore open are filled up with different materials and workmanship from the original building. But could hardly appear otherwise, though they had been stopped up by Constantine, as we make no doubt they were. Had the ancient churches been open on all sides, how could that object of primitive veneration, the altar, have been preserved safe from violation? How could the sacred mysteries be kept secret from the heathens, in conformity with the canons? Of what use was the ancient order of

Ostiarii or door keepers, mentioned by St. Ignatius in the first century, and St. Cornelius in the third? and indeed of what use were church doors themselves?

[c] Paulinum asserit patrum traditio ecclesiam, contex- " tam dudum, ut diximus, virgis, ligno tabulatu in- " duisse, et plumbo, à summo usque deorsum, coope- " ruisse. Egit namque prædicabilis viri solertia ut nihi " decederet sanctitati et plurimum accederet ornatui." Gul. Malm. Antiq. Glaston. apud Gale.

[d] Venerable Bede, speaking of the abovementioned church of Lindisfarn, which Bishop Finian had built of oaken planks and covered with reeds, says: " Episcopus " loci illius, Eadbert, ablatâ arundine, plumbi laminis " eam totam, hoc est et tectum et ipsos parietes ejus, " cooperire curavit." This happened about the year " 700."

[e] " In Rhypis basilicam polito lapide, a funda- " mentis usque ad summum ædificatam, variis columnis " et porticibus suffultam in altum erexit et consum- " mavit." Eddius Vita S. Wilf. c. xvii. apud Gale. This writer flourished in the year 720.

[f] " Profunditatem ecclesiæ (Hagulstaldensis) cryptis " et oratoriis subterraneis et viarum anfractibus inferius

" cum magnâ industriâ fundavit. Parietes autem qua-
" dratis et variis et bene politis columnis suffultos et
" tribus tabulatis distinctos, immensæ longitudinis et
" altitudinis erexit. Ipsos etiam et capitella columna-
" rum quibus sustentantur et arcum sanctuarii historiis
" et imaginibus et variis celaturarum figuris ex lapide
" prominentibus et picturarum et colorum grata varie-
" tate, mirabilique decore decoravit. Ipsum quoque
" corpus ecclesiæ appenticiis et porticibus undique cir-
" cumcinxit, quæ miro atque inexplicabili artificio per
" parietes et cocleas inferius et superius distinxit.—
" Denique citra Alpes nullum tale tunc temporis reperiri
" poterat." Ricard Prior de Stat. Haguld. Ecc. c. iii. Twysden X. Script.——" Neque ullam domum aliam
" citra Alpes montes talem (sicut Hagulstaldensem)
" ædificatam audivimus." Eddius. Vit. Wilf. c. xxii. See also Will. Malm. De Pont. L. III. p. 273.

[G] Bede L. IV. c. 2. " Ædificia mirabile quantum
" expolivit, arbitratu quidem multa suo, sed et cæmen-
" tariorum, quos ex Româ spes munificentiæ attraxerat,
" magisterio." Will. Malm. De Pontif. L. III.

[H] " Architectos sibi mitti petiit qui, juxta *morem*
" *Romorum* ecclesiam de lapide ingenti ipsi facerent.', Bed. L. V. c. 22.

[I] "Sunt autem in eadem villa duæ aliæ ecclesiæ, "una haud procul a muro matris ecclesiæ, mirandi "operis, et ipsa scilicet in modum turris erecta et fere "rotunda, à quatuor partibus totidem porticus habens.— "Has tres ecclesias S. Wilfridus incæpisse creditur, sed "ejus successor, Beatæ memoriæ, Acca eas consum- "mavit." Ric Haguls. c. 5.

[K] "Idem B. Papa (Stephanus III. A. D. 770.) fecit "super Basilicam S. Petri turrim, in qua tres posuit "campanas quæ clerum et populum ad officium Dei con- "vocarent." Anastas. Biblioth. in Vita Steph. III.

[L] "Sub medio longitudinis aulæ ipsius (Ecclesiæ "Cantuariensis) duæ erant turres prominentes ultra "ecclesiæ alas; quarum una, quæ in austro erat, sub "honore B. Gregorii altare dedicatum habebat et, in "latere, principale hostium (ostium) ecclesiæ, quod "*Suthdore* dicitur. Alia vero turris in aquilonari plaga, "è regione illius, condita fuit in honore B. Martini." Gervas. Dorob. De combust et Reparat. Ecc. Doroo. apud Twisden X. Script. N. B. Gervase in this passage quotes the account of the old church, by Eadmer, who had seen it previously to its being burnt in the time of Lanfranc.

[*L] " Porro Normanni erant tunc & sunt adhuc ves-
" tibus, ad invidiam culti, cibis, citra ullam nimietatem,
" delicati.—Domi ingentia ædificia moliri.—Religionis
" normam usquequaque emortuam adventu suo suscita-
" runt. Videas ubique in villis ecclesias, in vicis et
" urbibus monasteria, novo ædificandi genere, consur-
" gere, recenti ritu patriam florere, ita ut periisse diem
" quisque opulentus existimat, quem non aliqua præclarâ
" magnificentiâ illustret." Wilhelm. Malmesb. De Wilhel. 1°. L. III. De Reg. p. 102.

[N] " Hæc (sanctimonialis Begu) dum in dormitorio
" sororum pausans, audivit subito *in aere* notum *cam-*
" *panæ*, quo ad orationes excitari vel convocari solebant
" cum quis earum de sæculo fuisset convocata." Bed. Hist. L. IV. c. 23.—N. B. The use of painted glass in England is brought down, by modern writers, as low as the reign of Henry III. Such may be the æra of its being *made* in England ; but it is likely that the use of it is a great deal more ancient, since it was employed in windows at Rome as early as the year 813; in which year Leo III. glazed the church of St. John Lateran with glass of various colours. See Fleury, L. XLVI. Sec. XX. and his authorities.

[O] Upon what authority then has Mr. Whittington pronounced the arches in this choir, which the writer

had referred to in a former work, Hist. of Winch. Vol. II. p. 152, to be "doubtful instances." He says, "Perhaps these intersections were not originally "pierced." To clear up this doubt, let the choir be first inspected. Without the twenty windows of the intersected arches it would be nearly dark at noon day. Next let the work itself be examined. It will be found that the cornice from which the pointed arch springs, not only on the surface of the wall, but also through the whole thickness of it, is of one and the same construction. Lastly, let the pointed arches at *fig.* XX. copied from the South transept of St. Cross, which have no intersecting semicircles over them, be compared with those of the windows, they will be found to be of exactly the same very singular design and workmanship with them, and therefore are to be pronounced coeval with them, that is to say, as ancient as 1136 at least. With equal inattention to his subject, this writer denies that "the church of St. "Cross is a sort of collection of architectural essays;" affirming that "it is made up of successive alterations and "repairs."—It is for the architectural critic, who surveys the still diversified arches, and columns with their capitals and bases, ribs, mouldings, &c. in the same series and adjoining to each other, all of them being of characteristical Norman workmanship, to decide, whether the author had good reason for his assertion, or Mr. Whit-

tington for his denial. This gentleman's difficulties would all have vanished had he conceived that De Blois finished the choir, and erected the huge columns of the nave, with the side aisles, leaving to Toclyve, or one of his other successors, to raise the upper story and West façade.

[P] "Nunc autem quæ sit operis utriusque differentia "dicendum est. Pilariorum igitur tam veterum quam "novorum una forma est, una grossitudo, sed longitudo "dissimilis. Elongati sunt enim pilarii novi longitu- "dine pedum fere duodecim. In capitellis veteribus "opus erat planum, in novis sculptura subtilis. Ibi in "chori ambitu pilarii viginti duo, hîc autem viginti "octo. Ibi arcus et cætera omnia plana utpote sculpta "secure et non scisello, hîc in omnibus fere sculptura "idonea. Ibi columna nulla marmorea, hîc innumeræ. "Ibi in circuitu, extra chorum, fornices planæ, hîc "arcuatæ et clavatæ. Ibi murus super pilarios direc- "tus cruces à choro sequestrabat, hîc vero, nullo in- "terstitio, cruces a choro divisæ in unam clavem quæ "in medio fornicis magnæ consistit, quæ quatuor "pilariis principalibus imititur, convenire videntur. "Ibi cœlum ligneum egregiâ picturâ decoratum, hîc "fornix ex lapide et topho levi decenter composita est. "Ibi triforium unum, hic duo in choro et in ala ec-

" clesiæ tertium. Quæ omnia visu melius quam auditu " intelligere volenti patebunt." Gervas. De Combust. Dorob. Ecc. Twysd. col. 1502.

[q] It cannot be questioned that the primary object of the religious inventors and improvers of ecclesiastical pointed architecture was to excite awe and devotion, for which purpose they studied sublimity rather than richness, as Mr. Whittington supposes, the latter quality being secondary and quite subservient to the former. Hence we cannot prefer the portal of Amiens cathedral, nor even that of Rheims, which he gives us a plate of, to that of York, or even to that of Litchfield, after all the violence the latter has sustained in a formal siege: we cannot, I say, prefer that of Amiens in consequence of " armies of saints, prophets, martyrs, and angels lining " the door way, crowding the walls, and swarming round " all the pinnacles." Survey, p. 149. According to this rule, the façade of the church of Wells would be the most beautiful of English cathedrals. For our part, we think that the *Simplex munditiis* of Horace is the rule of all that is beautiful, and that a due proportion rather than a profusion of statuary and other ornaments, is a recommendation of pointed as well as of other architecture. In the same taste the writer repeatedly extols the church of Amiens for being " all windows," p. 151 and 153, than which, in the opinion of Mr. Burke, nothing

can be more injurious to the effect of the sublime. The surveyor of French architecture dwells, with rapture, on the size of the French portals, p. 127; but surely a door may be too high as well as too low, and few persons of taste would admire a door which, with its ornaments, reaches to a great deal more than half the height of the whole building to which it serves as an entrance, as is the case with his boasted cathedral of Rheims, and still more so with that of Rouen. The neighbouring abbey church of St. Nicaise was in this particular, as well as in the general appearance of its façade, far preferable to the cathedral of Rheims. The surveyor reproaches the English cathedrals with having only three parallel aisles, whereas some of those in France have five, p. 117. The latter undoubtedly had their advantage in the ancient service; which use, however, the side chapels in most of our great churches answered better. With respect to effect, it is most certain that more than one aisle on each side of the nave appears to be an excrescence, and takes off from the unity of the grand design. It is like having more than two hands or two legs. The French boast of the portal of Rheims, which is far surpassed by that of York, especially in its restored state, as Mr. Carter has exhibited it. Again they boast of the choir of Beauvais, to which we oppose that of Lincoln, stripped as the latter has been since the Reformation, and now disgraced as it is by a pro-

fane disgusting altar piece. Lastly, they boast of the nave of Amiens: with this (though seen to so great an advantage in consequence of all the rich and judicious decorations which the late good Bishop La Motte added to it) we hesitate not to compare that of York.

THE END.

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Fig. 2

Fig. 1

Fig. 3

Fig. 4

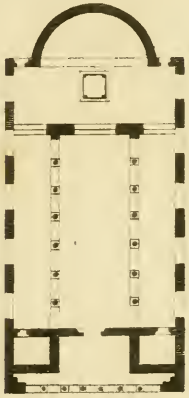

Fig. 5

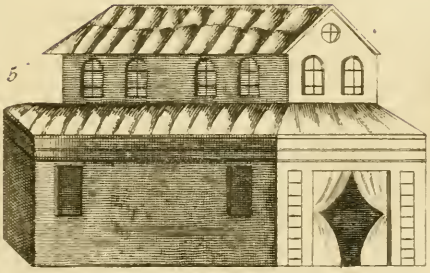

Fig. 6

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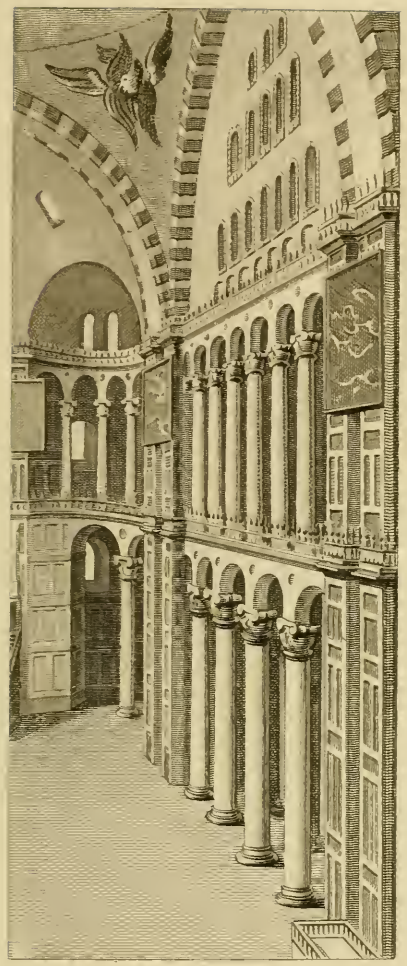
Fig. 7



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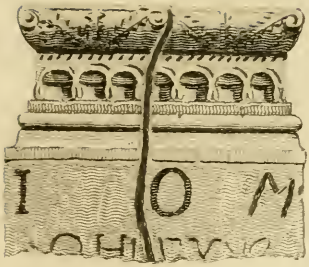

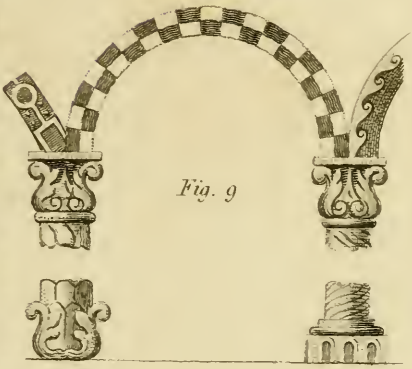

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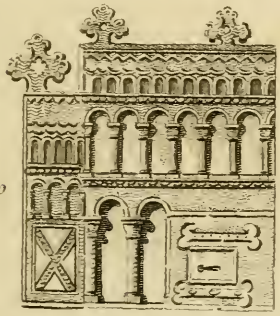

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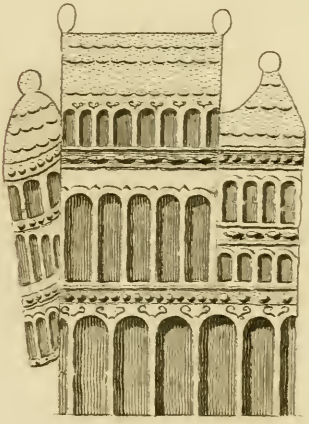

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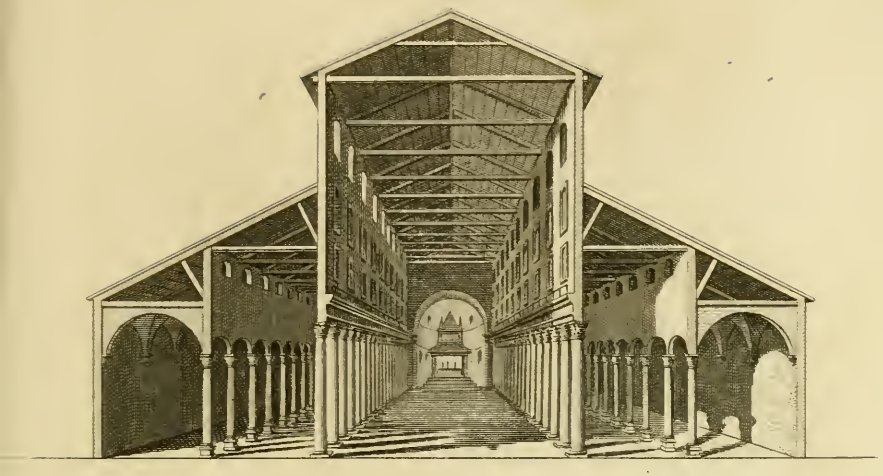

Fig. 13

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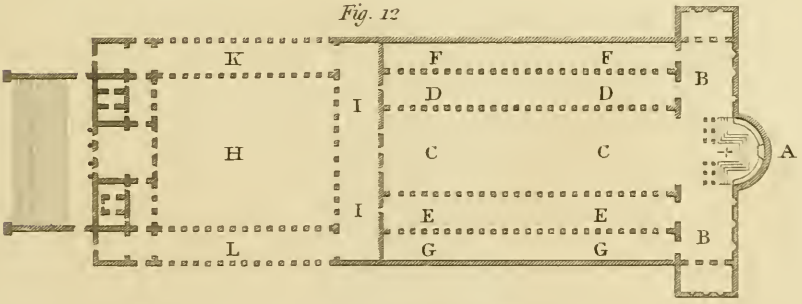

A *The Absis*

B *The Transepts*

C *The Nave*

D E *The high side Aisles*

F G *The low side Aisles*

H *The Atrium, or open Court*

I *The Narthex, or Penitents porch*

K L *North & South porches*

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Fig. 15

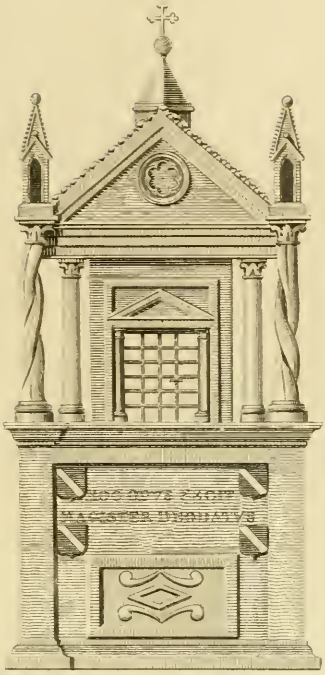
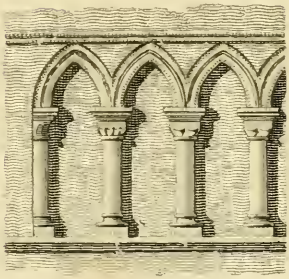


Fig. 16

Fig. 17



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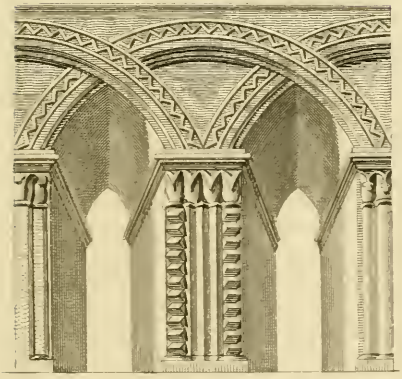

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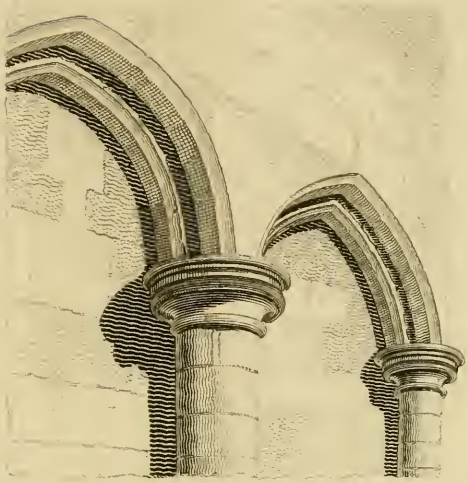

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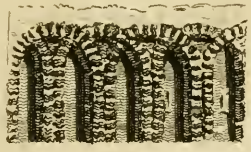

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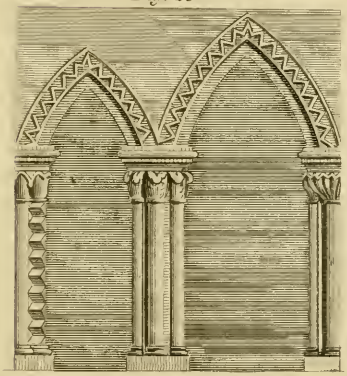

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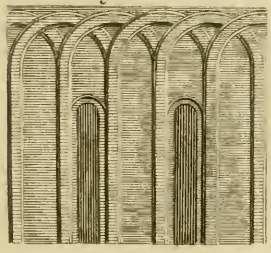

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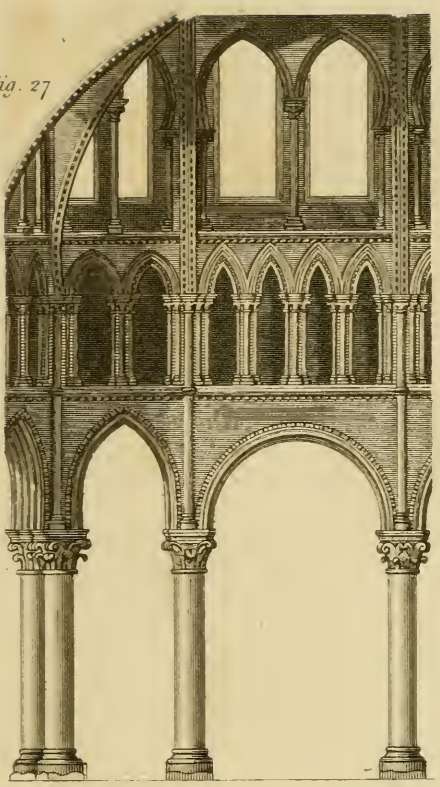

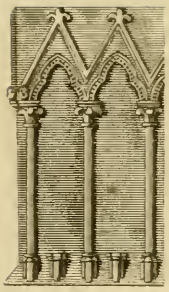

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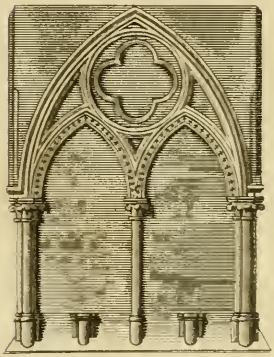

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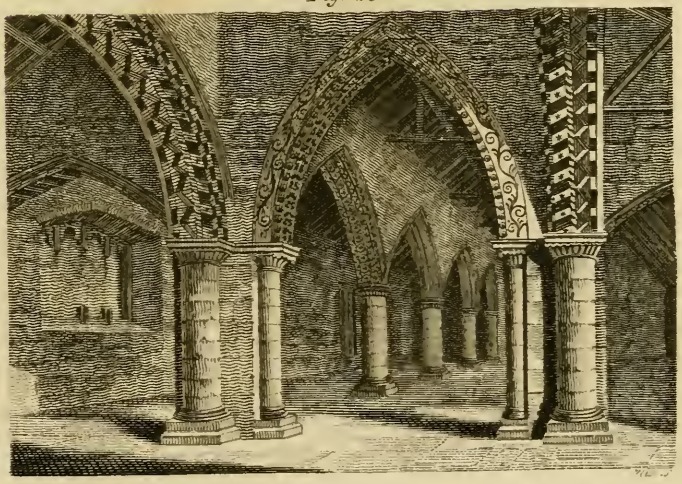

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Fig. 31

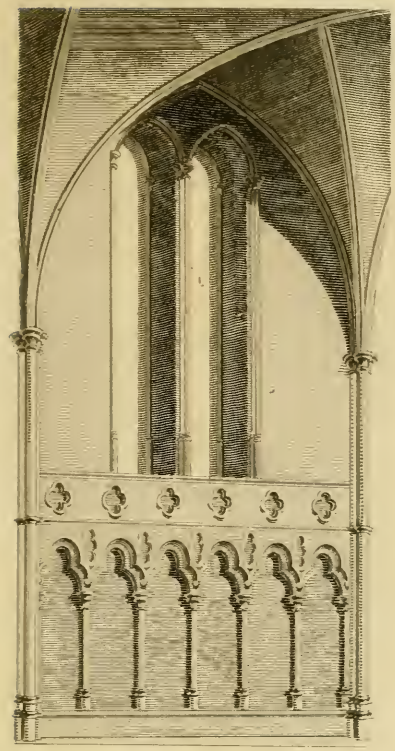

Fig. 32

Fig. 33.

Fig. 34

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C. Wild Delin. J. Roffe Sculp.

Interior View of the East end of
CANTERBURY CATHEDRAL - Built A.D. 1175

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C. Wild delin. W. Shury sculp.

Interior View of the Nave of YORK MINSTER, — Built circa A.D. 1300.

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FRONTISPIECE.

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1810

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PREFACE

TO THE

SECOND EDITION.

PUBLIC approbation having made a second edition of this little work necessary, the opportunity has been embraced, to make such additions as would tend to complete the original design of the book.

The history of the progress of Architecture, and of the five orders, is considerably augmented, and will, it is hoped, be found a pretty ac-

curate sketch of the subject. The description of the Greek and Roman houses, and villas, has never before been collected into one point of view; as the subject is interesting, it will be entertaining, perhaps useful. Respecting the translation, or rather explanation, of the several names of apartments, &c. it must be observed, the terms are now become obsolete, and from whatever is mere description every man will conjecture according to his own fancy.

It may be proper to explain here, a seeming contradiction respecting

the glazed windows of the ancients, having asserted, (p. 77), "glass for windows was then unknown," and soon after Pliny mentions the glazed windows of the portico of the *atrium:* The substance used by the ancients for this purpose was not glass, similar to what is now used, but a stone called *lapis specularis*, a species of talc, according to Pliny's Natural History; which easily spliting into thin transparent plates or laminæ, was fit for the purpose: it has a similar application now, for objects to be viewed by the microscope.

I shall here suggest, because I think the text did not warrant the translation, that the sleeping room and apartments described by Pliny, (page 85) as free from noise or other disturbance, were most likely the rooms occupied by himself, and were what we should call the master's apartments: the conveniences and situation of which appear fully to authorise his partiality to them.

To the dictionary, besides many other articles, is added, an accurate ichnographical description of the most celebrated Greek and

Roman structures; to render which completely useful, the proper names of parts are retained, and printed in italics: for this part of the work I have been under the necessity of consulting many authors, and there is no point of any consequence on which I have not examined most of the books on the subject. This part therefore, as it may be relied upon for its accuracy, will, I am persuaded, meet with respect.

To this edition is added a plate of the modern Ionic capital, according to Scammozzi.

occasion for information; yet that precision in rules necessary to a professional man, is not the kind of knowledge wanted; but something more general which will not fatigue the mind to understand, or burthen the memory to recollect. Under this impression, I make public what was originally designed for mere amusement.

The guide I followed in selecting and illustrating, was, a recollection of the wants I formerly felt, when desirous of a general knowledge of Architecture. Many treatises there are on the subject; but as I chiefly sought amusement, the sight of large and intricate works damped the ardour of enquiry, and more than once repelled the desire of knowledge. To understand the

productions of scientific writers, required an exertion of attention mere amusement startled at; however, at last activity was roused by the inconvenience of ignorance, and fortunately meeting with Sir W. Chambers's excellent Treatise, the path was considerably smoothened, and trod with greater pleasure than at first I expected: from this and other books I was afterwards induced to examine, the following sheets may be considered as notes or minutes, of what is necessary to be known by one, whose desire, as mine was, is rather general information, than of the minutiæ of the science.----In this view, I hope there will be found sufficient to give a tolerably precise idea of the five orders and their several parts; the

engravings exhibit their general effect, and are selected from antiques which have ever been respected for their proportion and elegance: these, with the deviations of modern times, and the historical account of each order, will, I flatter myself, render the acquiring a knowledge of the subject both easy and entertaining; yet sufficiently accurate to enable a Gentleman to sketch any drawing of Architecture, fancy or necessity may prompt him to have executed, without erring much from the general rules of design, and from which a workman will readily reduce the smaller parts to the exactness requisite to be worked from.

The frontispiece shews each order drawn to the same height

that their relative proportion and strength may be seen at one view.

That information might not stop at the beginning of the science, I have translated from Vitruvius, what his excellent pen has recorded, as the rules of the ancients in building their edifices or temples, the distribution of columns, and their diminutions. These will, I hope also be found useful to travellers who visit the remains of ancient architectural splendour and magnificence; as in a pocket volume they will have examples of the five orders, with the laws observed by the ancients in the great outline of their public structures, by what name and character each order of building is distinguished, with rules for adjusting the columns; from which,

an edifice, though in ruins, may, with considerable certainty, be restored to its original form.

I have also added a Dictionary, or explanation of terms used by artists, to express the several parts of buildings; this will I hope, assist, as well travellers, as those who read the accounts of professional men; it will facilitate understanding their labours, and, of course, render them more pleasant.

I hope, in its general acceptance, the title of *Ancient Architecture* will be allowed to the following sheets, though noticing only the Greek and Roman styles; omitting to mention those very ancient efforts in the science, traces of which remain in Upper Egypt, and in many parts of India the æra of whose founda-

tion is so remote, that no certainty can be formed of their age; they evince much labour and much magnificence. Also Gothic Architecture I have avoided mentioning, not because I think slight of, or disapprove that light though firm, and grave though pleasant, kind of Architecture, of which this country boasts the best and most complete specimens. The effect of awe and reverence this kind of building always produces in the mind, is one of the strongest proofs which can be given of its propriety and fitness, for large sacred buildings: these I have avoided, confining myself to the Greek and Roman styles, which may truly be called classical, and which are in most general request and use.

Upon the whole, my endeavour is intended more for the Gentleman than the Artist.---How far I have succeeded in the several particulars, I leave to others to determine, assuring them I have spared no pains to be both accurate and useful.

The portrait in the title page, is of the celebrated JAMES STUART, Esq. generally known by the appellation of *Athenian Stuart:* this is copied from an impression of a plate intended for his promised volume. From a personal knowledge of Mr. Stuart I can say, this is an extraordinarily good likeness, which, from my respect to the man, as well as to a great artist, I beg leave to multiply.

1789.

RUDIMENTS

OF

ANCIENT ARCHITECTURE.

PART THE FIRST.

THE study of Architecture has, in every enlightened age, and by every civilized nation, been held in very honourable esteem; as a necessary and pleasing science, and of evident utility.

When we consider it as improved by the Greeks about the time of Pericles, its perfection and beauty, how conspicuously it exhibited the liberality, splendour, and magnificence of those concerned in erecting structures, the remains of which astonish us; and how highly flattering it was to the mind of man in an age of splendour, to raise edifices which should strike be-

holders with admiration ; it excites little surprise that every attention should have been given to the practice of Architecture, and that its professors should have received the most liberal encouragement from men of rank and taste, anxious for renown.

Persons of the most exalted stations have honoured it as students, and thought it not beneath them to attend to its rules.

In present times, among ourselves, we have instances of dignified persons studying the rules of Architecture, which, united with true taste, have produced designs that would do honour to the genius of the first professors.

Animated by such examples, it is not surprising the science should now be regarded with considerable attention : the frequent tours to Italy, Greece, and other parts celebrated for elegant edifices, though now in ruins, have excited a love for, and spread much knowledge and justness of taste among our nobility and gentry, whose leisure affords opportunity for exploring the remains of ancient architectural grandeur ; add to this, the great industry and attention of some of our most celebrated

architects in examining and delineating those standards of art ; the liberal encouragement these have experienced, has enabled them to publish their researches, which furnish amateurs and students at home, with most of the advantages acquirable from visits to Rome, Athens, &c.

The important use of this science, and the elegant accomplishments connected with its study, have almost rendered a knowledge of it requisite to the education of men of rank and taste ; and from persons of high rank and large fortune only, can Architecture hope to receive its proper encouragement, either for elegance or extent. My intention is not to enter into a detail of encomiums on the art ; but merely to remark its great utility, and by what high characters its study has been, and is honoured.

I proceed, therefore, to my more immediate design, which is, to give a short historical account of the five orders of Architecture of the ancients ; which must be considered as the basis of true proportion.

The great antiquity of building is self-

evident: When men first felt the inclemencies of the seasons, it had its beginning, and it has spread wherever the severities of climate demand shelter or shade: we trace it in the Indian's hut, and in the Greenlander's cave; which shew in those barbarous parts of the globe, from what mean original it rose to its present glory. And perhaps the neighbourly assistance required in erecting the meanest fence against the inclemency of the weather, was the first introduction of civil society: thus a number of habitations were formed together, and men, in consequence, had mutual conversation and intimacy. It is easy to conceive, that, in this early state of society, genius had expanded but little; the first efforts were small, and the structure simple; perhaps no more than a number of trees leaning together at the top (in the form of a cone), interwoven with twigs, and plastered with mud, to exclude air, and complete the work. In this early period, we may suppose each desirous to render his own habitation more convenient than his neighbour's by improving on what had been already done: thus in time,

observation, assisting that natural sagacity inherent even in uncultivated minds, led them to consider the inconveniences of the round sort of habitation, and seek others more spacious and convenient of the square form.

This improvement introduced the necessity of supports for the cross beams, which were to sustain the roof: the trunks of trees were so ready an application, we cannot suppose they hesitated long in their choice. Thus from the nature of things arose the idea of what we now call columns, which have from time to time undergone many changes, and at last have produced those elegant pillars which we term the orders of Architecture.

From early antiquity the Egyptians have been considered as the inventors of arts; and during their prosperity and independence all other nations sought and studied their philosophy and their sciences; so that being learned in the arts of the Egyptians became proverbial. Among other arts derived from them, antiquity will justify me in numbering Architecture; and here I beg to be understood as mean-

ing principally that species of original Architecture, where the strength of the fabric was more regarded than its elegance or beauty; yet it must be acknowledged there is much grandeur of idea, symmetry of parts, and elegance of execution, in those temples, the ruins of which yet remain in upper Egypt, at Hermopolis, Tentyra, Thebes, Karnac, Luxor, Apollinopolis Magna, Philœ, &c. parts of which are enriched with sculptured figures and ornaments tastefully composed and skilfully wrought, as are shown in the Travels of Pocock, Norden, and Denon: of the great temple at Thebes the latter author says, "of the hundred columns of the portico alone of this temple, the smallest are seven and a half feet diameter, the largest twelve, the space occupied by its circumvallation contains lakes and mountains, &c." From these wonders which still remain, it can only be conjectured what have been destroyed.

Dr. Pocock, speaking of a statue of Isis which he supposed to be three thousand years old, says, "We are not to despise such uncommon remains of antiquity, but to

set a value on them ; as we see in such pieces these noble arts in their infancy; and by considering the different workmanship of different ages, we may observe how arts gradually improved, till at length, under the Greeks, they came to the greatest perfection, which their masters, the Egyptians, were too opinionative to learn of their scholars." Denon, in his late publication *Voyage dans l'Egypte*, in many places asserts the same thing; he has also given what may be considered as very extraordinary, and tending much to strengthen this reasoning ; the figure of a regular Doric fluted column, which he saw in one of the galleries of the temple at Tentyra.

I consider it as not to my purpose, to enter into much detail of the rise and progress of Architecture, but think it fair to conclude, that from Egypt, where cotemporary nations sought the arts and studied the sciences, the Greeks derived their first ideas of building, but which were so changed and improved by transplantation, that scarcely can it be known from what stock they had their origin. The sublime and penetrating genius of the

Greeks, anxious to add elegance to convenience, disregarded the massive and ponderous Architecture of the Egyptians.

Such therefore may be considered the track by which Architecture acquired its elegance; for certainly the structures of Egypt are much more ancient than those of Greece; and as it may be considered the best character of buildings that they provide for the comforts and conveniences of man, so it must be allowed that the Greeks first rendered them productive of grace, elegance, and beauty: for to the fine eye, skilful hand, and sublime genius of that nation is Architecture indebted for its rules of decorum, elegance of design, and taste of ornament, which began to arrive at perfection under Phidias and Praxiteles, aided by the fostering care of Pericles; which period, including the reign of Alexander the Great, must be considered as its climax of grace, elegance, and beauty in Greece.

It has been laid down as a maxim, that the mind of man is influenced by modes of government; and certain it is, the Greeks with their independence, lost also

their superior vigour of genius; and what remained was, with the spoils of their cities carried to Rome: wherefore from this period, the Romans must be considered as the encouragers and patronisers of Architecture. From this period also, its progress was great and rapid, though little was done of new invention; but the rules of the Greeks were applied to structures so numerous, and of such wonderful extent, that we douht which most to admire, the original inventors of these sublime rules, or those who applied them to such stupendous buildings.

There are some authors well read in ancient history who wish to prove that from the Etruscans, and not from the Egyptians, the Greeks imbibed their first ideas of Architecture. The Etruscans (or Tuscans) certainly were well skilled in building, and from these the Romans in their early state sought help in all their large works: the remains of the temple of Jupiter Capitolinus, the Cloaca Maxima, &c. the work of Tuscan artists, shew them to have well understood the science and the practice of useful Architecture. How-

ever I shall leave these arguments to be more fully discussed by others; it suffices me to have shewn, that the Greeks completed the science of Architecture by uniting the useful and the agreeable. I beg leave further to add, that those elegant antique vases usually called Etruscan, are now allowed to be of Greek workmanship by able judges, who have examined them carefully in the country where the best have been found, and in the greatest abundance.

To attempt producing an authority or origin for every species of ornament attending the orders, would be wandering in a maze of uncertainty, attended with much labour, and little recompense: the general parts may, with more certainty, have their origin pointed out.

The Plinth, it is very reasonable to imagine, was, at first, simply a square tile or stone, placed under the trunk of the tree or primitive column, to prevent rotting, to which it was exposed from the constant moisture of the earth; it also served as a more firm and solid footing to the column.

There are instances of many buildings of considerable elegance and extent which have no plinth to the columns. Such as the temple of Erictheus at Athens. The temple of Vesta at Tivoli, and some others: and the old Dorics have neither plinth nor base.

The Torus, or swell above the plinth, may have originated from the root or lower part of the tree being thicker than the part above, which also fixed it more firmly on the plinth; or, as by some it is conjectured to have been only a rope or bandage round the trunk, to prevent its splitting. According to Vitruvius it represents the shoe.

The Shaft of the column has been already noticed.

The idea of the Capital may have originally been suggested by some tree, whose arms spreading just above where it was necessary the upper parts should be cut off (to be of a proper length), the swell of the arms very likely gave the first idea of the swell of the capital, which was also attended with this advantage, by being broader on the top, it was better formed

for receiving the works above. It would be aukward reasoning to continue the comparison of a column to the human figure, and so compare the capital to the head of a man.

The Abacus was a tile or stone, placed with intent to throw off the water, and prevent its sinking into the column; or rather it interposed a broader resting plane between the head of the column and the parts above it.

The Astragals and Fillets were bandages round the column.

These conjectures, and conjectures they are at the best, suppose the ideas for all the parts to arise from structures of wood; but if we consider the material of which buildings afterwards were made, and of which only we have any remains, it is but fair to say these several additions to the bottom and top of columns were absolutely necessary in structures of stone, to widen or spread the point of bearing when the diameter of the column was decreased; to every example where the columns are no more than four or five diameters high, the base is wanting; and the very ancient

example of a Doric at Tentyra, given by Denon, has neither capital nor base, yet in Egypt there are abundance of columns of equal or greater antiquity which have both bases and capitals, although of a peculiar form.

The Architrave consisted of the outward and under beams or ties necessary to hold or unite the columns together.

The Frize was the height occupied by the cross beams which formed part of the roof and tied the building together, and from the projecting ends of which arose the idea of the Triglyph; the intermediate space was the Metope.

The Cornice, and its ornaments, were the ends or outer edge of the timbers, rafters, &c. of the roof.

The Mutules, Denteles, Modillions, &c. from the above source also, were accidental hints improved, when to usefulness was wished to be added ornament; and which became permanent, when structures of wood gave place to more elegant and durable ones of stone.

The buildings in Egypt being all constructed with flat roofs, were terminated

by a large projecting Cavetto only, consequently Denteles, Modillions, &c. are not to be found in them ; but where the climate required a sloping roof, these ornaments, originating in the form of the roof, are to be found.

The orders as now executed, are five, and range as follow: the Tuscan, the Doric, the Ionic, the Corinthian, and the Composite ; which are distinguished from each other by the column with its base and capital, and by the entablature.

The Tuscan order is characterized by its plain and robust appearance, and is therefore used only in works, where strength and plainness are wanted; it has been used with great effect and elegance in that durable monument of ancient grandeur, Trajan's column at Rome ; indeed, general consent has established its proportions for such purposes, beyond all others.

The Doric possesses nearly the same character for strength as the Tuscan, but is enlivened by its peculiar ornaments; as the mutule in the cornice, the triglyph in the frize, and the guttæ or drops under

the triglyph; these decorations characterize the Doric order, and in part are inseparable from it. Its proportions recommend it where united strength and grandeur are wanted.

The Ionic partakes of more delicacy than either of the former, and therefore, as well as on account of its origin, is called Feminine, and not improperly compared to a matron-like appearance; it is a medium between the masculine Doric, and the virginal slenderness of the Corinthian:— the boldness of the voluted capital, with the beauty of the shaft, makes it eligible for porticoes, frontispieces entrances to houses, &c. Denteles were first added to the cornice of this order.

The Corinthian possesses more delicacy and ornament than any other order; the beauty and richness of the foliaged capital, with the delicacy of the pillar, render it very properly adapted, when magnificent elegance is required: it is frequently used for internal decoration to large or state rooms; the appearance is of virginal delicacy, and gay attire; modillions

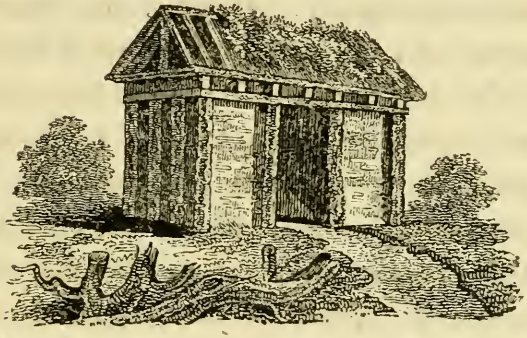
are appropriate to the cornice of this order.

The Composite order is the same as the Corinthian in its proportions, and nearly alike in its effects: the addition of the Ionic volute to the capital, gives a bolder projection. It is applicable in the same manner as the Corinthian. Denteles and modillions were applied together in the cornice.

The examples chosen to exhibit the effects, and give a general idea of the proportions of the several parts at one view, are selected from antiques; these compositions having stood the test of ages, for their symmetry and effect: the modern proportions in the descriptive account, I have taken from Sir William Chambers's useful Treatise on Civil Architecture. To the examples shewn in the plates, the measurements are figured to each particular member; thus, by comparing them, the variations of the moderns from the ancients may be easily known.

The measurements are in minutes, that is, one-half of the lower diameter divided

into thirty parts or minutes, which method, having fewer calculations than any other, is preferable: the projections are measured from the perpendicular of the superior and inferior parts of the column.



OF THE FIVE ORDERS.

Of the *Tuscan* order little historic can be said; its plainness of ornament gives it the first place in most treatises: there is no regular example of this among the remains of antiquity. Piranisi has given a drawing of a Tuscan base found at Rome, but of what date is uncertain. Vitruvius, in an indistinct manner, has mentioned its general proportions, but through his whole book does not refer to one structure of this order. The Trajan and Antonine columns at Rome are reckoned of the Tuscan order, though they have eight diameters for their height; the torus and capitals are certainly more ornamented than is consistent with Tuscan plainness. The fluting to the necks also are after the most ancient Doric examples. It is somewhat singular there should be no remains of this order; and were it not for what little Vitruvius has written of it, it certainly

might have been lost to the moderns. The plainness of its appearance, no doubt, caused it to be neglected at Rome; but in no other place has been discovered any truly ancient example.

Of the Doric we have many remains of very ancient date, which leads me to think the Tuscan is no other than the Doric more simplified, or deprived of its ornaments to suit certain purposes, where strength and cheapness were wanted; nevertheless it is applied with propriety and effect, to the entrance of cities, large gateways, and in military architecture, where massive strength only is required.

I have selected the profile given by Palladio, who saw some remains in Italy, which might lead him to more just ideas of what the ancients practised in this order. It certainly derived its name from the people of Tuscany, in Italy, who first used it.

Sir William Chambers gives it the following proportions:

"The height of the column is fourteen modules, or seven diameters; that of the whole entablature three modules and a half,

which being divided into ten equal parts, three are for the height of the architrave; three for the frize; and the remaining four for the cornice: the capital is in height one module; the base, including the lower cincture (which is peculiar to the measurement of this order) of the shaft, is also one module; and the shaft, with its upper cincture and astragal, is twelve modules: in interior decorations, the height of the column may be fourteen modules and a half, or even fifteen modules; which increase may be in the column only." It is customary in executing this order to diminish it one quarter; I think without sufficient reason; as its character of extraordinary strength would be better preserved, by the usual diminution of one eighth, or one sixth.

Of the *Doric* order there are many examples still remaining; some of very high antiquity, and of proportions so dissimilar from the practice of later times, that one cannot help concluding, they were produced before experience had matured the rules of art. In several buildings exhibited in the antiquities of Pæstum, Sicily, Ionia, and

Athens, the height of the columns does not exceed four diameters, or at most four and a half: the low appearance of these in large buildings, must surely convince us solidity of construction was regarded more than elegance of design. Indeed the various examples of the Doric order of these massive proportions, prove this to be the order of columns first used in buildings of stone.

Though the Tuscan pillar is more plain in the ornaments, and, as now practised, of fewer diameters; yet, as we have neither example, nor authority, on which to suppose it ever much varied from the rules at present acknowledged, I think we may conclude it is no other than the Doric order, by being executed plainer (as before observed), adapted to more menial services by the inhabitants of Tuscany.

The Doric order, (which is no small mark of its antiquity), has experienced many great changes in its proportions and parts, originally very low, as before remarked; afterwards it was allowed six diameters, and in succeeding times eight.

The history of the Doric order may be

divided into three epocha. First when the columns did not exceed four diameters in height, as to the temple called Thoricion, ten leagues from Athens; here the columns have four diameters, and are not fluted except four and a half inches under the capital, with regular Doric fluting; the rest is smooth. Also to a temple at Corinth, where the columns are four diameters, and are fluted. To these may be added, those remaining at Pæstum, in Italy; where to one temple the columns are four diameters high, to another four and a half, and to the third rather more.

In the Island of Sicily, also, there are many examples of these proportions, of high antiquity, and of great magnitude, particularly that dedicated to Jupiter Olympius, at Agrigentum; the columns of which are eleven feet diameter at the capital, and exceed thirteen feet diameter at the base; making the circumference more than forty feet; the channels or flutings are two feet over at the base. At Selinunte, also, are the ruins of six large Doric temples, the columns under five diameters and fluted, except the

largest, which appears not to have been completely finished.

The second æra may be presumed when the columns had nearly six diameters in height; as to the Propylea, or grand entrance into the citadel of Athens; to the temples of Minerva and Theseus, in the same city, all which were built in the flourishing times of Pericles, and the columns are only five and a half diameters high; also the more ancient temple of Apollo, at Delos, where the columns are smooth or plain; having twenty channels or flutings three inches long in the neck, or top of the column, and as many at the foot, two inches long; the intermediate part is plain; and it has been conjectured that on solemn occasions this part was covered with embroidered work or tapestry.

The third period of time is when six or more diameters were allowed, as to the temple of Augustus, at Athens, or, as Stuart, on good evidence, calls it, the entrance to a market, where six diameters are used. These are all without bases: in this division must be included the temple of Hercules, at Cora, in Italy, where the

columns have eight and three quarters diameters, and have bases; which, without doubt, is comparatively a modern work.

Vitruvius allows this to be the most ancient order, and gives the following account of its origin: "Dorus, the son of Helenis, and the nymph Optyce, built a temple in the ancient city of Argos, to the goddess Juno, which happened to be of this order, but which then had no regular proportions; it derived its name from the patron of the building. This example, or order, was followed by all the cities of Achaia."

"Ion, the son of Xuthus, afterwards built a temple in Asia, to Apollo Panionius, of this order; and, to render it more agreeable to the eye, he gave six diameters to the column, being guided therein by the example of nature, which has given to the height of man six times the length of his foot."

Modern practice allows eight diameters, as well as a base, which was never given to the Doric order by the ancients: this is another mark of its antiquity; for certainly the base is no less proper than elegant.

Concerning the flutings whether they were at first practised or not, is impossible to determine; the remains of this order of the oldest date are fluted. I am inclined to think, when any thing like ornament was wished to be added, the fluting of columns early presented itself. It has been conjectured the flutings or channels were intended for resting-places for the spears or weapons, of the warriors, who went to the temples to worship. There are examples among the antiques of the column being squared off, or wrought with pans, as they are called, instead of hollows: to the temple of Hercules, at Cora, the columns have the lower third part with pans, and the upper part of the shaft with the regular Doric fluting, which is a singular instance of mixture of style in antique columns. In the same manner are the columns of the portico of Philip, in the island of Delos, which are rather more than six diameters high. The columns at Cora have eight and three quarters diameters for their height, and stand upon bases of a very ungraceful form.

The triglyph, a characteristic mark of

this order, has more the appearance of art; the ends of projecting joists or cross beams will produce this effect, or near enough, to be improved into what we at present see them; the places assigned them also corroborate this idea. In old Doric temples the triglyph at the angles is not placed over the centre of the column, but at the corner of the frize, and of course is over the outer edge of the column.

"Vitruvius says, that in building, they laid the joists from the interior wall to the exterior parts, and as much of the joist as appeared unhandsome was sawed off, which, not having a pleasing effect, they made tablets like the triglyphs now in use, fixed them against the sawed ends, and painted them in wax, &c. Thus the triglyphs, interjoists, and metope, in Doric work, had their origin from the disposition of the timbers in the roof; afterwards in other works, some made the rafters that were perpendicularly over the triglyphs, to project outward, and carved their projecture; hence, as the triglyphs arose from the dispositions of the joists, so the mutules under the corona were derived from the

projecture of the rafters, wherefore, in stone or marble structures, the mutules were represented declining, in imitation of the rafters; and also on account of the droppings from the eaves, it is proper they should have such declination."

This also explains the ornament and situation of the guttæ, or drops, which were perhaps large heads of nails, intended to prevent the joist from drawing in too much by the incumbent weight.

The ornaments on the metope, or the space between the triglyphs, may have been originally trophies of the Deity, or implements of sacrifice placed there; as the bull's skull, which has been deemed appropriate to this order by the moderns.

M. Winkelmann has taken some pains to prove, from a passage in Euripedes, that the metopes or spaces between the triglyphs were open in the most ancient temples. How this may have been in wooden buildings, cannot now be determined: those structures which remain, have the space filled with masonry.

The profile here given is from the theatre of Marcellus, which has ever been

considered as a just proportion for this masculine order: the measurements are according to M. Desgodetz. The denteles in the cornice belong not so properly to this order as to the Ionic: I have taken the liberty to alter the slope of the corona, which in the original is declining, and is thought in modern times to have a heavy effect: it was executed there on the rule before stated; or perhaps for some optical reason, as it had a considerable elevation. The column has eight diameters, which is now the general practice, is without a base, but the attic base, or its peculiar one may be used. This example is not fluted; but the base to this order (Plate VII.) shews the manner of a Doric fluted column, which differs from every other, being very shallow, and without any space or fillet between the flutings, which are generally twenty, sometimes twenty-four.

The modern proportions from the before-cited author, are as follow:

"The height of the column, including its capital and base, is sixteen modules: the height of the entablature, four modules; which being divided into eight parts, two

are for the architrave, three for the frize, and three for the cornice: the base is one module in height; the capital thirty-two minutes, or a little more."

The *Ionic* order has the following account of its origin by Vitruvius.

"Ion (the same as before mentioned) building a temple to Diana, and seeking some new manner to render it more elegant, had recourse, as before in the Doric order, to the human figure; and gave to this new order a feminine delicacy: thus he was the first who gave eight diameters to a column, that the aspect might be more pleasing; and that its appearance might be more lofty, he added a base, in imitation of a shoe; the volutes, like locks or plaits of hair, hanging on each side, he gave to the capital, ornamented with fruits, or flowers in festoons, and furrows, or flutings down the column were wrought, resembling the folds or plaits of a matron's garment."—"Thus he invented two kinds of columns, in the Doric imitating a manly robust appearance, without ornament; in the Ionic, regarding a female delicacy,

accompanied with ornaments pleasing and elegant."—" Succeeding architects much approving the taste and ingenuity of this design, allowed eight diameters and a half to this order."

This account of Vitruvius points out in what manner another column or order of Architecture was introduced, an invention which has justly been celebrated and followed, on account of the beauty and elegance of its parts. Many temples, and other structures have been built of this order in various parts of Greece and Italy. It may be observed, and is indeed rather singular, that on the Etruscan vases, whose age we do not know and on pieces of ancient sculpture wherever columns are represented, they most generally are marked with the character of the Ionic volute, although accompanied with the Doric fluting.

Vitruvius records an anecdote much in praise of the Ionic order, in the following words: "The difficulty attending the proper adjustment of the mutules, metopes, and triglyphs in Doric structures, was such,

as frequently to be a cause of much inconvenience and trouble to architects in large buildings, and also rendered their aspect confused and embarrassing; on which account, and the massy appearance of the Doric column, it was thought improper for sacred buildings; of this opinion were Tarchenius and Pytheus, with many ancient architects; also the celebrated Hermogenes, who, when he was building the temple of Bacchus at Teos, rejected the Doric, though all the marbles were ready cut, and in its stead erected a temple of the Ionic order."

From the remains of this very celebrated building, the example of this order here shewn is taken: the grandeur of its appearance will, I flatter myself, justify the choice: it is here given as restored in that elegant work the "Ionian Antiquities."

Denteles properly belong to the Ionic cornice, they represent the assers, or smaller rafters, which supported the tiles.

The volute of the capital is now generally executed on an angular plan, the same as in the Composite order; so that, viewed

every way, it has the same appearance: this differs from the general mode of the antique, which is to have the volutes parallel; and to Michael Angelo this has been attributed as a new invention; but examples are found in the capitals of the angle columns, in the temple of Erictheus at Athens; and in the temple of Fortuna Virilis at Rome.

Piranisi has endeavoured to prove the first idea of the Ionic volute to have been derived from shells; be this as it may, many pleasing forms of convolution may be obtained from the section of shells.

The modern Ionic represented on the plate is according to Scamozzi, which is of good symmetry and form, erring only in being too much enriched.

The standard of the modern proportions is as follows:

"The height of the column is eighteen modules; and that of the entablature four modules and a half, or one quarter the height of the column, as in the other orders, which is a trifle less than in the regular antique Ionics: the capital is twenty-one minutes; and the base thirty minutes

in height: the shaft of the column may be plain, or fluted, with twenty, or twenty-four flutings, whose plan may be a trifle more than a semicircle, because they then appear more distinct; and the fillet or interval between them must not be broader than one third of the breadth of the fluting nor narrower than one quarter thereof; the ornaments of the capital are to correspond with the flutings of the shaft; and there must be an ove above the middle of each fluting. The entablature being divided into ten equal parts, three are for the architrave; three for the frize; and four for the cornice. In interior decorations, where much delicacy is required, the height of the entablature may be reduced to one fifth of the height of the column."

The *Corinthian* order, in the opinion of Vitruvius, " differs from the Ionic only in its capital; the Ionic capital having no more than one third of the diameter of the column for its height; but the Corinthian capital is allowed one entire diameter, which gives to the column a noble, but delicate grandeur. The other members placed on the Corinthian pillar, are com-

mon to the Doric and Ionic orders; for it has no particular species of ornament peculiar to its cornice: sometimes it has the Doric mutules and triglyphs in the architrave; sometimes an Ionic frize, with denteles in the cornice; in a manner, it is no more than a third order, risen out of the former two, which has nothing peculiar to itself, but the capital." The origin of which he thus records:

"A marriageable young lady of Corinth fell ill, and died; after the interment, her nurse collected together sundry ornaments with which she used to be pleased; and putting them into a basket, placed it near her tomb; and, lest they should be injured by the weather, she covered the basket with a tile. It happened the basket was placed on a root of acanthus, which in spring shot forth its leaves; these running up the side of the basket, naturally formed a kind of volute, in the turn given by the tile to the leaves."—"Happily Callimachus, a most ingenious sculptor, passing that way, was struck with the beauty, elegance, and novelty of the basket surrounded by the acanthus leaves; and, according to this

idea or example, he afterwards made columns for the Corinthians, ordaining the proportions such, as constitute the Corinthian order."

Vitruvius, in the foregoing account, forgot the peculiarities of the Corinthian cornice, or, the entablature to that order was not then practised in the manner we find remaining among ancient buildings; for to this cornice, the modillion is ever an attendant. But exactly according to this description of Vitruvius, is the cornice of the portico at Athens, called Poikilie, as represented by Stuart.

The superior beauty and elegance of this order have rendered it famous, and the many examples existing among the fragments of antiquity, sufficiently evince the great esteem with which it was regarded.

The ravages of cruel and desolating war have not left us one remain of this order, of the many celebrated examples which the city of Corinth possessed, where arts of every kind, and particularly Architecture, eminently flourished and were carried to perfection. In latter times, the conduct of Lucius Mummius, in the destruction of

that polished people and city, would have justly been considered as the grossest barbarism: the temples, the sacred buildings were destroyed, and levelled with the ground; so that at one stroke the works of ages were desolated, the labours and ingenuity of thousands destroyed, and posterity deprived of every trace of this order, in the place of its nativity and nurture.—Although Rome would not suffer Corinth as a rival city, there is no doubt she deigned to follow the rules and laws of art established by her vanquished enemy, especially in Architecture. The elegance and purity of style in many of her buildings clearly evince Grecian ingenuity and art.

The profile here given, is according to Palladio's measurements of the Corinthian pillars to the portico of the Rotunda, commonly called the Pantheon at Rome: the universal celebrity of this structure, pointed it out as a proper example.

The moderns have adapted the following proportions: "The column is twenty modules in height; the entablature five modules; the base one module, and may

be either Attic or Corinthian: the capital has seventy minutes in height; the proportion of the members of the entablature, is the same as in the Tuscan and Ionic orders. If the entablature is enriched, the shaft of the column may be fluted, and the flutings may be filled to one third part of their height with cabling, which will strengthen the lower part of the column, and make it less liable to injury. In very rich interior decorations, the cabling may be composed of reeds, ribbands, husks, flowers, &c. The capital is enriched with olive leaves, as almost all the antiques at Rome of this order are; the acanthus is seldom employed but in the Composite order: the entablature to this order may be reduced to two ninths, or one fifth of the height of the column; in which case it is best to use the Ionic entablature, or reduce the denteles of the cornice."

The *Composite* or Roman order certainly owes its origin to that constant solicitude after novelty, which ever renders the mind of man restless in an enlightened and highly cultivated age. The desire of variety and novelty, either of new inven-

tion, or combination, certainly engaged the Roman architects to unite with the proportions and enrichments of the Corinthian order, the angular volute and denteles of the Ionic, and by this union to compose a new order.

The introduction of the angular Ionic volute, and the omission of the upper row of leaves in the capital, certainly give it a more bold and noble aspect, than that of the Corinthian capital, yet different from any of the other orders, possessing an elegance and projection very pleasing, and may be used with very agreeable and happy effects.—There are many examples remaining at Rome, which shew the general estimation of this order there, in the height of its splendour and prosperity. In their triumphal arches, it was used with good effect, where it produced an agreeable boldness, uniting elegance and ornament.

The example here given is, that executed in the triumphal arch, erected to the honour of Vespasian and Titus at Rome; the justness of the proportions, with the elegance of the ornaments, mark it as a proper standard for the Composite order.

The proportions of the moderns are as follow: "The height of the column is twenty modules; and that of the entablature five modules; the capital has seventy minutes in height; the base measures the same as in the Doric and Ionic orders; and as the module is less, all its parts will of course be more delicate: the shaft may be enriched with flutings, to the number of twenty or twenty-four, as in the Ionic order; there is no reason why they should be augmented. The principal members of the entablature may have the same proportions as the two former orders, viz. being divided into ten equal parts, three are for the height of the architrave, three for the frize, and four for the cornice."

I shall add here, more to complete the history than to recommend their use, that there are ancient examples of oval columns; where the circle of the column is elongated by a broad plain space on the two opposite sides of the shaft. Of this kind were some fragments found in the Island of Delos, by M. Le Roy. There are two others at La Trinita da Monte, at Rome. Also in the tomb near Mylassa in

Greece, according to M. De Choiseul; this elegant structure is very perfect; is of a square form, on a basement; the pillars are insulated, and support a vaulted ceiling highly enriched; each front has two oval fluted columns with the narrow face outwards; at the angles are pilasters having the same enrichments as the columns; the capitals are composite, and the volutes are omitted. This elegant little morceaux is of white marble, and about nineteen feet square. At Megara, near the same place, is another example of the same kind.

Having thus given the particulars relative to each order, I shall conclude this part with some general observations, necessary to be known and observed, in delineating or making designs in Architecture; these I have extracted from the work before quoted, and have given them in the author's own words, as alteration is needless, and liable to mislead.

An order may be divided into two parts the column including the plinth of its base, with the abacus of the capital; and the entablature, which includes all above the

capital, and may be divided in the large, into the architrave, the frize, and the cornice.

" By examining the antiques, it will be found, that, in all their profiles, the cyma and the cavetto are constantly used as finishings, and never applied where strength is required ; that the ovolo and talon are always employed as supporters to the essential members of the composition, such as the modillions, denteles, and corona; that the chief use of the torus and astragal, is to fortify the tops and bottoms of columns, and sometimes pedestals, where they are frequently cut in the form of ropes ; and that the scotia is employed only to separate the members of bases, for which purpose the fillet is also used, not only in bases, but in all kinds of profiles."

" An assemblage of essential parts and mouldings, is termed a profile ; on the choice, disposition, and proportion of these, depends the beauty or deformity of the profile. The most perfect are, such as are composed of few mouldings, varied both in form and size, fitly applied with

regard to their uses, and so disposed, that the straight and curved ones succeed each other alternately. In every profile there should be a predominant member, to which all the others ought to be subservient, and seem either made to support, to fortify, or to shelter it from the injury of the weather, as in a cornice where the corona is principal, the cyma or cavetto cover it, and the modillions, denteles, ovolo, and talon support it."

"When ornaments are employed to adorn the mouldings, some of them should be left plain, in order to form a proper repose; for, when all are enriched, the figure of the profile is lost. In a cornice the corona should not be ornamented, nor the modillion band; neither should the different facias of architraves, the plinths of columns, fillets, nor scarce any square member, be carved; for they are, generally speaking, either principal in the composition, or used as boundaries to other parts; in either of which cases, their figures should be distinct and unembarrassed. The dentele band should remain uncut, where the ovolo and talon imme-

diately above and below it are enriched; for, when the denteles are marked, particularly if they be small, the three members are confounded together; and, being covered with ornament, are much too rich for the rest of the composition; a fault carefully to be avoided, as the just and equal distribution of enrichments is on all occasions to be attended to.—For, in effect, the ornaments of sculpture in Architecture, are like diamonds in a lady's dress, with which it would be absurd to cover her face, and other parts that are in themselves beautiful."

"When mouldings of the same form and size are employed in one profile, they should be enriched with the same kind of ornaments.—It must be observed, that all the ornaments of mouldings are to be regularly disposed, and answering perpendicularly above each other; the middles of the modillions, denteles, oves, and other ornaments, all in a line; for nothing is more confused and unseemly, than to distribute them without any kind of order. The larger parts are to regulate the smaller; all the ornaments in the entablature are to

be governed by the modillions or mutules; and these are to be dependent upon the intervals of the columns, and so disposed, that one of them may correspond with the axis of each column. It is farther to be observed, that the ornaments must partake of the character of the order which they enrich; and those used in the Doric and Ionic orders must be of a simpler kind, and grosser make, than those employed in the Composite and Corinthian."

"In the exterior, whatever does not contribute to the general effect of the whole building, is in a great measure useless, and an expence that might more judiciously be employed in places where it could be more attended to.—The parts that are in themselves large, and so formed and disposed as to receive broad masses and strong impressions of light and shade, will of course excite great ideas; but if they are broken into a number of small divisions, and their surface so varied as to catch a thousand impressions of light, demi-tint, and darkness, the whole will be confused, trifling, and incapable of causing any great emotions."

Thus far Sir W. Chambers. An observation or two more, and I finish the subject.

First. The appearance of columns is often varied by adding rusticated cinctures at equal or other distances to a column; this is a modern invention, gives a very unnatural appearance, and disguises the noble figure of the column. Rustic work is with greater propriety, and better effect, introduced into large entrances, parks, and gardens; also into grottos, baths, or fountains, where an irregular and rough appearance better suits the place and purpose. Le Clerc observes these kind of rustic ornaments are never to be imitated, excepting in the gates of citadels or prisons, in order to render these entrances more frightful and disagreeable.

The flutings of columns are sometimes wrought round or spirally on the column; there is an ancient example of this, in a small temple below Trevi in Italy, the plan and elevation of which are given us by Palladio; where, of four columns in front, two have the flutings spirally, and the two center ones are wrought with leaves on the shaft.

The rule for the diminution of columns has ever varied; the ancients frequently diminished the column from the very foot, or from one quarter or one third of its height; the latter method is now generally practised; the diminution should be seldom less than one eighth part of the lower diameter of the shaft, nor more than one sixth: this latter is the more graceful: some, by way of giving a better contour or appearance, allow a small swell or bellying, in the lower part of the middle division of the pillar.

It may not be altogether useless to give the general rules to be observed in *pedestals*, where it is necessary to introduce them. A determinate rule cannot be given, as they must vary in height according to the circumstances which render them useful: they have ever been considered as mere auxiliaries, to give height. and elevate the column above surrounding objects which impede its view. When they are used by choice, it is common to give them one third, or one quarter part of the height of the column and entablature, which is thus divided: of nine equal parts, two are

for the base, one for the cornice, the remaining six, for the die of the pedestal, which is equal in size to the plinth of the column; the enrichments should be regulated by those of the entablature, &c. When columns are in couples, if pedestals are used, they should have but one; also in a colonade or peristyle there should be but one pedestal continued, having breaks or projections in the cornice, &c. so that each column may seem to have its particular pedestal.

Each column has its particlar *base*. The Tuscan base is the most simple, having only a torus and plinth. The Doric base has an astragal more than the Tuscan. To the Ionic base the torus is larger on a double scotia, with two astragals between. The Corinthian base has two toruses, two scotias, and two astragals. The Composite base has one astragal less than the Corinthian. The Attic base consists of two toruses and a scotia, and is applicable to every order except the Tuscan, which has its particular base. Plate 7.

RUDIMENTS

OF

ANCIENT ARCHITECTURE.

PART THE SECOND.

OF THE TEMPLES OR SACRED BUILDINGS OF THE ANCIENTS.

I HOPE to be pardoned in requesting the reader's attention to an observation or two, before we enter on the rules of Vitruvius concerning sacred buildings.

Of all the buildings of the ancients, those sacred to their deities remain most perfect, and in the greatest number. Indeed, considering the polytheism of their religion, (the Greeks are reported to have had thirty thousand Gods; nor were the Roman deities less numerous) and how much men and nations vied in endeavouring to shew the greatest liberality in

erecting buildings to the honour of their tutelar deities, or when they had vowed worship and homage to any particular one; I say, when we consider what variety of opportunities offered to shew honour, to exhibit splendour, and to display liberality, we need not wonder at the great number of sacred edifices still remaining: indeed they are so many, and of such magnificence, as chiefly to absorb the traveller's attention, the remains of other public structures being but few. I have therefore given no more on public edifices, than what Vitruvius has written of sacred ones, and the rules given by him for the disposition of columns.

OF TEMPLES.

The following account of their origin and progress will, I think, be considered as rational; for doubtless they had their states of progression, as well as every other human invention.

There is implanted in the mind of man so strong an idea of a superior power,

that every nation has some worship or ceremonies, by which they shew their dependance on, and reverence of a Deity, whose purity of nature requires distinct places for religious services, attended by every mark of awe and respect, best suited to express their ideas of reverence and submission to Omnipotent Power.

Mankind in the rudest state ever acknowledged powers divine. The earliest writers, sacred and profane, describe them performing their religious services on the top of mountains, or elevated places; thereby making the nearest possible approach to heaven, and believing their prayers would be more readily heard. In the sacred writings, there are various instances of elevated situations being preferred; and the same appears evidently to have prevailed among the heathens; for at Rome, Athens, &c. the most sacred temples are on the most elevated situations.

In Homer, among other instances, the piety of Hector is commended by Jupiter, for the many sacrifices made by him, on

the top of Mount Ida. In the fable of Mount Parnassus, with others, the eminence is considered as the hallowed residence of the poetic genii, or gods. At what period, or by what nation of the heathens, temples were first erected, does not appear. The Persians did not judge the gods to be of human shape, (as did the Greeks,) therefore had no temples, thinking it absurd to confine the gods within walls, whose house and temple the whole world was.

Mount Ida was remarkable for the quantity and largeness of its timber, and I believe it is universally felt and allowed that the places best calculated to inspire religious ideas are groves, or thick woody places, where gloomy dulness and shade naturally impress the mind with awe, and lead it to contemplation. This is farther confirmed by the sacred groves, which were always adjoining the oldest and most eminent temples. Pliny also assures us, that trees in old times served for the temples of the gods. Tacitus reports the same to have been the custom of the old Ger-

mans. Q. Curtius says the same of the Indians. The Druids, who has not heard of their sacred oaks and consecrated groves? the Romans too, practised the same mode of worship, and had *Luci*, or groves, dedicated to some particular deity in most parts of the city of Rome.

Such, we may therefore suppose, were the places first set apart for religious worship; but when the weather, or inclination, rendered an enclosed place desirable, they laboured, in this early state of arts, to produce a building, merely suited to the necessary purposes. But when society was more enlarged and refined, and the profits of commerce and dominion accumulated to wealth, then the mind of man, which naturally runs towards excellence, was not content with the plain and simple structures already built. A modern writer has well observed, that, "Those who have already all they can enjoy, must enlarge their desires. He that has built for use, till use is supplied, must begin to build for vanity, and extend his plan to the utmost power of human performance; that he

may not soon be reduced to form another wish:" and, it is likely no small inducement was also used by the influence of those concerned in the worship and sacrifices of the times; for additional wealth naturally excited an increase of splendour and more costly ceremonies; these required more room, and a corresponding increase of state and magnificence, that the several rites, &c. might be suitably performed: thus, an edifice of more elegance, a building of greater extent and richer embellishments was required, which would shew superior honour and respect to the deity worshipped.

Thus, from the simplest structure rose the Antis, Prostyle, &c. till invention and ingenuity, aided by unbounded liberality, crowned the whole with the Hypæthral edifice. Excited by ambition, and enabled by vast riches, whose sources were far-extended territory and numerous fertile provinces, emperors, and even private persons, were enabled to erect the most costly temples, the extent and magnificence of which are truly astonishing.

It is a remark worthy notice, that the ancient architects did not follow in a servile manner the rules delivered by Vitruvius: yet certainly what he wrote, were the rules by which they planned their great outline, or design: however they might vary the smaller or inferior parts of an edifice. To enumerate a few instances of variation.

The temple of Minerva at Athens has eight columns in front; and Vitruvius allows but six to a peripteral, of which order this building is.

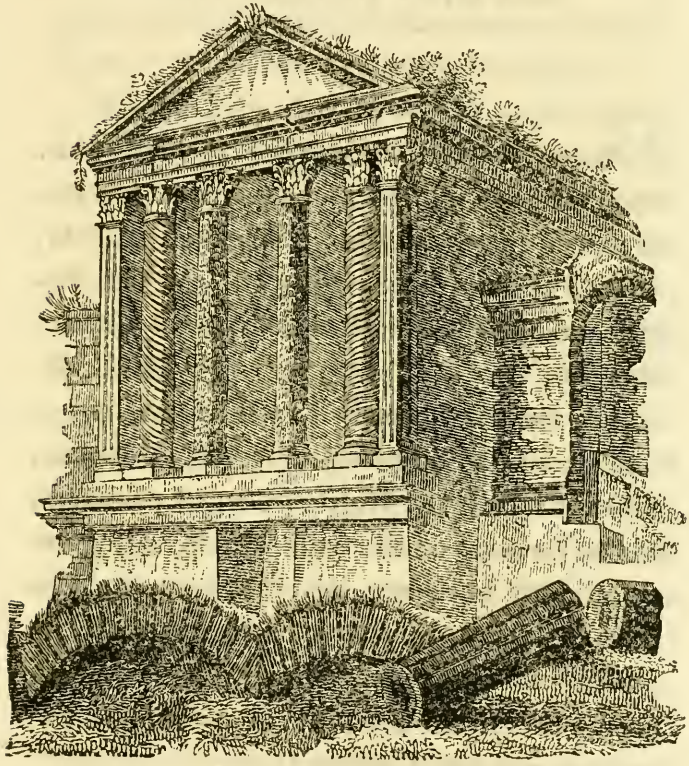
The temple of Minerva Polias has six columns in front, yet is prostyle; although Vitruvius allows but four to this order.

The temple of Jupiter Olympius, at Athens, has no more than eight columns in front, yet is hypæthral, to which Vitruvius gives ten columns in front. This is a variation recorded by himself, and without any particular notice of the violation of the rule; from which it should appear as not considered of much consequence. Also the temples at Selinunte, in Sicily, esteemed very ancient Dorics,

have one column more in the flank than the Greeks usually gave, thus several hexastyles, or six columns in front, have fourteen columns in the flank, and one has sixteen. This difference also is to be observed between the temples built by the Greeks, and those by the Romans. The rule of the former, was to give to the flanks one column more than double the number of those in front, thus an octastyle would have seventeen columns in the flanks, as to the temple of Minerva at Athens. The Romans, on the contrary, gave only double the number of intercolumniations; thus to an hexastyle, they would make only eleven columns in the flanks, that is, ten intercolumniations, making two columns less in the flanks, than the Greeks made; as is to the temple of Fortuna Virilis at Rome, and to the temple at Nismes, in France.

The walls of the cell were always placed opposite the columns of the pronaos, and posticum, according to the rule; at least I recollect but one example to the contrary, which is in the temple of Theseus, at Athens.—I thought it necessary to no-

tice these instances of the variation of the ancient architects, that the researches and genius of modern times might not be led into error, or fettered by observing as law, that which was not adhered to by those we wish to imitate.



VITRUVIUS

ON

SACRED BUILDINGS.

"Sacred buildings, or temples, differ in their various figures and aspects. Of the first order is the Antis; 2dly, the Prostyle; 3dly, the Amphiprostyle; 4thly, the Peripteral; 5thly, the Pseudodipteral; 6thly, the Dipteral; 7thly, the Hypæthral; which are distinguished in this manner.

The edifice or temple is called Antiæ, when it has in the front Antæ, or pilasters, at the corners of the wall which forms the cell; and between the pilasters, in the middle two columns, which support the pediment or porch; of which examples are at the three temples of Fortune, the one nearest the Colline Gate.

2dly, The Prostyle is the same as the Antis, only columns are added opposite

the pilasters or antæ of each corner, which support a chapiter or architrave, the same as in the Antis: an example of this manner is the temples of Jupiter and Faunus, in the Isle of Tyber.

3dly, The Amphiprostyle is the same as the preceding, only a postern or back front (Posticum) is added, with columns and pediment, the same as to the Prostyle.

4thly, The Peripteral has in the front and hinder porch (Posticum) six columns, and eleven, counting the corner ones, on each side. And these columns are so placed, that the space of an intercolumniation shall be left between the wall and the outer range of columns, leaving an ambulatory round the cell of the edifice: as in the Gate of Metellus, the temple of Jupiter Stator designed by Hermodius; and that founded by Mariana to Honour and Virtue, built by Mutius, which has no hinder porch.

5thly, To the Pseudodipteral, the columns are so placed, that in the front and behind there are eight columns, and on each side, counting the corner ones, fifteen; and the walls of the cell must cor-

respond, or run parallel with the four centre columns, both before and behind: there must be the space of two intercolumniations, and the thickness of one column between the walls and the outer columns. Of this order Rome affords no example; but at Magnesia, the temple of Diana, by Hermogines Alabandin; and that of Apollo, built by Amnesta, are examples.

6thly, The Dipteral is octostyle or eight-columned, both before and behind; but it has a double row of columns round the cell, as in the temple of Jupiter Quirinus of the Doric order, and the Ionic temple of Diana, at Ephesus, built by Ctesiphon.

7thly, The Hypæthral is decastyle or ten-columned, both before and behind: the other parts are the same as the Dipteral, but within it has a double row of columns, one over the other all round, resembling a porch, which is called a Peristyle: the middle has no roof; it has folding-doors both before and behind. We have no example of this at Rome; but Athens has one, the temple of Jupiter Olympius, which is octostyle or eight-columned.

There are also round temples, of which some are Monopteral, without cells, and built on columns: the other is called Peripteral. Those without cells have a tribunal or throne, and are ascended by steps of one third of the diameter of the temple: the columns, placed on pedestals, are as high as the diameter of the temple, taken at the outer side of the pedestals; their thickness is one tenth part of the height of the shaft and capital: the height of the architrave is half the diameter of the column: the frize, and other ornaments above, may be according to the general rule.

The Peripteral is built with an ascent of two steps, on which the pedestals of the columns are placed: the wall of the cell is distant one fifth part of the diameter of the temple from the pedestals of the columns: in the middle is left a space for folding doors: the diameter of the inner part of the cell must be equal to the height of a column without the pedestal; the columns round the cell are placed with suitable proportion and symmetry. The enclosure in the middle is thus proportioned:

one diameter of the whole building for its height; half is for the cupola, exclusive of a flower on the top of the pyramid: the size of the flower shall be the same as a capital of the columns; the other parts may be according to the proportions already written.

By the same general proportions other kind of temples are built, but have different dispositions of their parts; as the temple of Castor, in the Circus of Flaminius: and the temple of Vejovius, between the two groves; also the temple of Diana of the Groves; where the columns are added on both sides the walls of the porch. This kind of building, as in the temple of Castor, in the Circus, was first used in the temple of Minerva within the Citadel at Athens, and in the temple of Minerva at Sunium, in Attica. They have the same proportions as the others; for the cell is in length double its breadth; and the same rule is followed for the sides as for the fronts.

Some there are who use the Tuscan disposition of the columns although they are of the Corinthian or Ionic orders.

To temples, whose walls with the antæ project to form a porch, two columns are placed opposite the walls which form the cell; thus blending the Tuscan and Greek manners.

Again, others by removing the walls of the cell, and placing them between the intercolumniation, leave a very large space within the cell; the other parts preserve the same proportion and symmetry. Thus has arisen a new order, which is called Pseudodipteral; and this kind is particularly useful for sacrifices. The same kind of temple cannot be made to every god because of the diversity of the ceremonies to be performed.

Thus I have explained, as far as I was able, every kind of sacred building—their order—the symmetry of their parts—the difference of their figure; and what variety is to be observed in them, I have been careful in writing."

The elegance and magnificence of a structure depending very much on the proper placing of the columns; and as it appears connected with the subject here treated of, I add the rules laid down by

Vitruvius, observed by the ancients, and allowed by the moderns, in the disposition of columns, called by that writer,

THE FIVE SPECIES OF BUILDING.

" Of buildings there are five sorts or species ; which are called, 1st, The Pycnostyle, that is, thick of columns. 2d, The Systyle, that are a little wider. 3d, The Diastyle, still wider. 4th, The Araeostyle, more distant than is proper. 5th, The Eustyle, which is the proper distance.

To the Pycnostyle, the distance of the intercolumniation is one diameter and a half of the column ; as in the temple of the divine Julius ; the temple of Venus in Cæsar's Forum ; and many others after the same manner.

The Systyle has two diameters of the column between the intercolumniation, and the plinths of the base are equal to the space which is between two plinths ; as in

the temple of Fortuna Equestris near the Stone Theatre, and others made after the same proportions. Both these sorts are inconvenient; for the ladies, when entering the temple to worship, cannot pass the columns arm in arm unless they go sideways: also by the frequency of the columns, the view of the door, and the signs or trophies of the deity, are hid, and the narrowness of the porch is inconvenient for walking.

The Diastyle has this distribution, viz. three diameters of the columns between the intercolumniations, as in the temple of Apollo and Diana. This has its inconveniences; because the architrave, on account of the distance between the columns, is liable to break.

In the Aræostyle they use neither stone nor marble, but make the beams of durable timber. This kind of building is straggling and heavy, low and broad. The pinnacles are generally ornamented with fictile or earthen ware, or brass gilt after the Tuscan manner, as is to be seen in the Circus Maximus at the temple of Ceres, and in Pompey's temple of Hercules, and also in the Capitol.

The Eustyle manner is now to be treated of; which, with great justice, for its usefulness, beauty, and durability, merits every commendation. It is formed by allowing to the distance of the intercolumniations two diameters and a quarter, and to the middle intercolumniation only, both before and behind, three diameters. Thus the figure has a beautiful aspect, is accessible without impediment; and round the cell is a stately ambulatory.

The rule is this:

The front of the building if it is Tetrastyle (four columns), is divided into eleven parts and a half, without reckoning the projection of the base of the column. If it is Hexastyle, (six columns), it is divided into eighteen parts. If it is Octastyle (eight columns), it is divided into twenty-four parts and a half. Of these parts, one, whether the building be tetrastyle, hexastyle or octastyle, shall be a module, which is to be the thickness of a column. Each intercolumniation, except the middle one, must be two modules and a quarter; the middle one shall have three modules both before and behind: the height of the columns shall be eight modules and a half:

by this division of the intercolumniation, the columns have a just proportion. Rome affords no example of this kind; but at Teos in Asia is one, the temple of Bacchus, which is octastyle.

Hermogenes was the first inventor of these proportions; he also first used the octastyle pseudodipteral; he first contrived to take away, without injuring the beauty, the interior range of columns in the dipteral (which are thirty-four), thereby very much decreasing both the labour and expence: this also gave a very large ambulatory round the cell, and, without missing the superfluity, preserved the majesty of the whole; for the walls and the columns were first thus disposed, that the view, on account of the asperity *(asperitas)* of the intercolumniation, should have more majesty: besides, it has this convenience, of sheltering a great many persons from rain, as well round as within the cell, which includes a great space. This disposition of pseudodipteral buildings was first discovered by the labour of the great and discerning spirit of Hermogenes; which, like a fountain, will serve posterity from

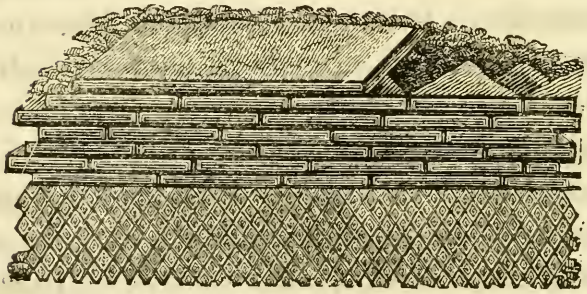
whence to draw rules for the Science of Architecture.

The columns to the Araeostyle should have for their thickness one eighth part of their height. For the Diastyle, the height of the column is to be divided into eight parts and a half; one part for the thickness of the column. For the Systyle, the height shall be divided into nine parts and a half; one part for the thickness of the column. Also for the Pycnostyle, the height shall be divided into ten parts; one part for the thickness of the column. The Eustyle also is divided into eight parts and a half, the same as the Diastyle; one part is given for the thickness of the column; and for the solidity of its parts it shall have its proper intercolumniation. As the space between the columns increases, so ought also the thickness of the columns. If it is araeostyle, and they should have only a ninth or tenth part for their thickness, they will then appear tall and slender, on account of the length of the intervals; for the air will in appearance diminish the thickness of the columns. On the contrary, if it is pycno-

style, and the columns have an eighth part for their thickness, they have a clumsy and ungraceful appearance, on account of the frequency of the columns, and the narrowness of the intervals; for this reason, the symmetry and proportion of each order should be attended to. Also the thickness of the corner columns must be increased one fiftieth part; for, by the great surrounding space, they will appear smaller to the view, and it is necessary art should rectify this defect of vision.

For the diminution of the shaft of a column, the following rule may be observed: if the shaft of a column is fifteen feet high the diameter of the lower part is divided into six parts; five of which are for the top diameter. If columns are from fifteen to twenty feet high, the lower diameter is divided into six parts and a half; five and a half of which are for the top diameter. If columns are from twenty to thirty feet high the lower diameter is divided into seven parts; six of which are for the top diameter. If columns are from thirty to forty feet high, the lower diameter is divided into seven parts and a half; six and a half of which are for the top diameter. If co-

lumns are from forty to fifty feet high, the lower diameter is divided into eight parts; seven of which are for the top diameter. If any are higher than those mentioned, they shall have the same proportions for their diminution.—An additional thickness is properly given, on account of the increased height; for, as the eye is attracted by beauty it is necessary it should be flattered by the pleasure it receives from proportionate and just distribution of parts, as it is when deceived by judicious additions; else the whole will have a bulky and inelegant effect."



OF

THE HOUSES OF THE ANCIENTS;

THEIR

SITUATION AND DISTRIBUTION.

This article was intended for its proper place in the dictionary, but in making it at all satisfactory, it has so much increased, I think it more advisable to make a separate article of it.

Respecting the dwellings of the ancients, we can only conjecture the situation of their various apartments, from combining the descriptions of several classic authors; little of such buildings remaining to guide our researches. Those of which traces are found, such as the baths of Titus, Caracalla, Dioclesian, the Villas of Adrian, Mecænas, &c. are of little use to this enquiry their extent and magnificence exceeding that of common structures.

To speculate on the accounts left by Pliny, and others, may not be unenter-

taining; perhaps not without its uses: for, from the numerous, studied, and multiplied conveniences of their Villas, some new ideas of plan and distribution may arise; the comforts and conveniences of life are so valuable, that they should be sought from every source.

The Greeks and Romans were particularly solicitous to keep the body in health by constant and strong exercise; to this purpose, it was necessary they should have spacious covered places, that in bad weather they might not be obstructed in their diversions, or games; which tended as well to the health and strength of the body, as to that of the mind. Under this impression, it is not to be wondered, their gardens, or pleasure grounds, were extensive and possessed all those conveniences which conduced so much to health and delight, by freely enjoying the fresh air in the Gestatio, or the Xystus.

To avoid anticipating conjecture, I shall proceed to the subject in question, beginning with a description of the houses of the Greeks, next those of the Romans, and finishing with their villas.

OF THE DISPOSITION OF THE HOUSES OF THE GREEKS.

We shall here follow the account given by Vitruvius.—" The Greeks use no atrium, but from the gate of entrance they make a passage of no great breadth; on one side of which is the stable, on the other the porters' rooms, and these are directly terminated by the inner gate: passing on, is the peristylium, having porticos on three sides; on the south side, are two antæ, which support and form a passage, within which (i. e. to the right and left) are the great œci, in which the mistress of the family, and the workwomen reside. To the right and left, are cubiculi, or chambers, of which one is called *Thalamus*, the other, *Amphithalamus*; and under the porticos of the peristyle are the common dining rooms, chambers, and family rooms. This part of the edifice is called *Gynæconitis*.

Through the passage with the antæ, is a large house, having a more spacious pe-

ristyle, in which are four porticos of equal height, or sometimes the one which looks towards the south, has higher columns; and this peristyle, which has one portico higher than the rest, is called *Rhodian*. In these houses they have elegant vestibules, magnificent gates, and the porticos of the peristyle are ornamented with stucco, plaster, and lucunariæ, (compartments.)

In the portico which looks to the north, is the cyzican triclinium, and the pinacotheca; to the east, are the libraries; to the west, the exhedræ; and in those looking to the south, are the square œci, so large, that they may easily contain four sets of dining couches, with the attendants, and a spacious place for the use of the games; in these halls, the men hold their convivial entertainments, for it is not customary in Greece for the mothers of families to lie down to dine. This peristylium and part of the house is called *Andronitides*, because here the men only are invited, without being accompanied by the women.

On the right and left, also, small houses are erected, having proper gates, dining rooms, and convenient chambers, that

when strangers arrive, they may not enter the peristylium, but be received in this hospitalium; for when the Greeks were more refined and opulent, they prepared triclinia, cubicula, and provisions for strangers: the first day inviting them to dinner, afterwards sending them poultry, eggs, herbs, fruits, and other productions of the country. Masters of families, therefore, when they abode in the hospitium seemed not to be from home, enjoying the full liberty of retirement, in these apartments.

VITRUV. Lib. 6. cap. 10.

OF THE CITY HOUSES OF THE ROMANS.

RESPECTING the houses of the Romans, I know of no better guide than Vitruvius, who, after describing such as are proper for merchants, bankers, &c. observes, "Those of the nobles, who bear the honours of magistracy and decide the affairs of the citizens, should have a princely vestibule, lofty atrium, (hall), and ample

peristylium, with groves and extensive ambulatories, erected in a majestic style; besides libraries, pinacothecas, (picture rooms), and basilicas, decorated in a manner similar to the magnificence of public buildings; for in these places, both public affairs and private causes are oftentimes determined."

From Vitruvius and other writers, the following may be considered as nearly the usual mode of distribution: The part which first presented itself, was the vestibulum, or what we call the portico; passing this, you entered the atrium, or hall, at the extremity of which, was the tablinum, or repository for books, records, &c.; from the sides of the atrium, you passed by alæ, or ailes, to the cavædium, which was an open court, surrounded by a portico, or piazza, at the extremity of which was the basilica, or place to administer justice, &c.

The triclinia, or dining rooms, with their procœton, or room for attendants; the cubicula, or chambers, with the baths, were disposed on the sides of the cavædium; also on the sides of the basilica

were the pinacotheca, or rooms for pictures and library; passing all these apartments, you entered the peristylium, which was as spacious as possible, and surrounded with a portico, or piazza; this was always of an oblong form; at the extremity of the peristylium were œci, or halls, of which Vitruvius mentions the Corinthian, the Tetrastyle, the Egyptian, and the Greek, or Cyzican.

The Corinthian œci have columns placed either on the podium (dado) or on the floor; and above have an architrave and cornice. The Egyptian had the columns detached from the wall, in the manner of a peristyle; the space between the columns and the wall, was covered with a pavement, and formed a walk round. This range of columns supported an entablature, on which was placed another range of columns, one fourth part smaller than the former, between which were the windows. The Greek or Cyzican œci were situated towards the north, generally had a view of the garden, with folding doors in the middle; they had also folding windows,

to the right and left, that the garden might be seen.

The Tetrastyle œci, from the name, appears to have had only four columns, and consequently was of the less enriched sort.

OF THE VILLAS OF THE ROMANS.

The Roman Villas consisted of three parts, one called the *Urbana*, a part where the master and his family dwelt; the other the *Rustica*, destined for the uses of husbandry; and the third the *Fructuaria*, or receptacle for the fruits of the earth.

In the choice of situation and aspect, the Romans were very particular, the latter requiring peculiar attention, as only by the aspect of the buildings and rooms, could they be rendered conveniently habitable in bad weather; glass for windows being then unknown, and its substitutes costly, and not in general use.

Vitruvius has given us the following rules; the winter triclinium (dining room)

and bath should look to the winter's declining sun, because the afternoon light is there useful; besides the western sun shining thereon produces heat, and makes that aspect warm and pleasant in the evening; bed-chambers and libraries, should look to the east, for in these the morning light is required; it is also proper, that the books in libraries may not decay, for in those that look to the south and west, they will be damaged by damps and worms, which the humid winds generate and nourish. The spring and autumn triclinium should look to the east, for the windows being then turned from the sun, proceeding westward, render those places temperate at the time they are generally used. The summer triclinium should look to the north, because this aspect is not like the others, rendered hot at the summer solstice; for being turned from the course of the sun, it remains always cool, and when used, is salubrious and pleasant. To the same aspect also, should be disposed Pinacotheca (picture room), as well as embroidering and painting rooms, that the colours used in the works, on account

of the equality of the light, may remain unchanged.

The better to convey an adequate idea of the extent, accommodation, and grandeur of the Villas of the Romans, I shall add Pliny's (the consul) description of his Villa at Laurentinum. It may be proper to observe, that this Villa was considered as on a small scale.

After describing the route, the views on the road, &c. he adds, my Villa is large enough to afford a convenient, though not sumptuous reception for my friends. The part which first presents itself is the *atrium*, (court yard) plain, but not mean; then the *portico*, in form of the letter O, which surrounds a small, but pleasant area; this is an excellent retreat in bad weather, being sheltered by glazed windows, but more by the projection of the roof. Beyond the *portico* is a pleasant *cavædium*, (open court) passing which, is a handsome *triclinium*, which advances upon the shore, so that it is gently washed by the waves, when the south-west wind blows. On every side are folding doors, or windows as large, so that from the sides and the

front, you enjoy a prospect, as it were of three seas, and backwards are seen the *cavædium*, the *portico*, and the area; again the *portico*, and *atrium*, terminated by woods and distant mountains. On the left of the *triclinium*, but not so forward, is a large *cubiculum*, (chamber or apartment) and then a smaller one, where one window admits the rising, and another the setting sun. From hence, you view the sea rather more distant, but more securely. This *cubiculum* and *triclinium*, by their projecture, form an angle, which not only retains, but augments the heat of the sun's rays.

Here then is my *hybernaculum* (winter room or apartment) and the *gymnasium* (place for exercise) for my family, which is never incommoded by any winds, but such as bring cloudy weather, and destroy the otherwise serene situation of the place. Adjoining to this angle, is a *cubiculum*, of a curved or round form, the windows of which admit the sun of consequence through its whole course. In the walls, are inserted library presses, furnished with books, more for amusement than study; close to this, is the *dormitorium*, (sleeping

room), separated by a space, having a covering of wood work, which collects and distributes the vapour to the room, in salubrious temperament. The remainder of this wing is allotted to my servants and slaves; yet, is generally sufficiently neat for visitors.

On the right side of the *triclinium*, is a most elegant *cubiculum*, with another large *cubiculum*, or moderate *cœnatio*, (common eating, or supper room), which receives light, both from the sun and the sea; after this, is a *cubiculum*, with a *procœton*, (servants room), for height, a summer, but for shelter, a winter apartment; being skreened from all winds: a wall only separates another *cubiculum*, with a *procœton*. There you enter the spacious and extensive *cella frigidaria* of the bath; against the walls of which, are two projecting *baptisteria*, sufficiently large to swim in; joining to this, is the *unctuarium*, the *hypocaustum*, and *propnigeon* of the baths; and two other cells, more elegant than sumptuous. Skilfully contrived, adjoins the *callida piscina*, (warm bath), where those who swim, enjoy a view of the sea: not

far distant, is the *sphæristerium*, (tennis court, of a circular form), which enjoys the warmest rays of the declining sun.

Here arises a *turris*, (pavilion, or summer house), under which are, two *diætæ*, (suite or set of apartments), and two also above, besides a *cœnatio*, from which is a beautiful prospect of the sea, the distant coast, and several pleasant Villas; there is also, another *turris*, containing a *cubiculum*, exposed to the rising and the setting sun; behind this, is an *apotheca*, and *horreum*, (cabinets, or store rooms), and underneath a *triclinium*, where the noise of the sea is not heard, but only in storms, and then but faintly. This looks on the *gestatio*, (a place to exercise on horseback, or in a carriage); and the garden which it surrounds.

The *gestatio* is encompassed with box, or rosemary, where the box is wanting; for box, when well sheltered, flourishes much, but withers, if exposed to the wind, or weather, or to the spray of the sea. To the inner circle of the *gestatio*, is joined, a shady row of young vines, with a walk, soft and pleasant, even to the naked feet.

The garden abounds with fig and mulberry trees, to which the soil is suitable, but not to other trees. The prospect here, not less pleasant than that of the sea, is enjoyed from a *cœnatio*, rather distant from the sea; on the back it is encompassed with two *diætæ*, whose windows look to the vestibule of the Villa, and to a fruitful kitchen garden.

Hence, a *crypto-porticus*, (a long inclosed room, or portico) extends, for size, comparable to a public building, with windows on both sides; those next the sea, the most numerous, on the garden side they are single, with fewer in the upper row. These, when the day is serene and calm, are all opened, but when the wind is troublesome, those on the opposite side are opened without any inconvenience. Before the *crypto-porticus*, is a *xystus*, (a spacious place for exercise, or a terras) fragrant with violets, in which the heat of the sun is increased by the reflection of the *crypto-porticus*, which at the same time, keeps off the north-east wind; wherefore it is hot in the front, and cool in the rear; it also skreens from the south-

west, and several other winds. These are its delights in winter; but much greater does it afford in summer; for before mid-day, the *xystus*, and after, the *gestatio* and neighbouring parts of the garden, are made temperate by its shadow, which is longer, or shorter, as the day proceeds. The building is also the coolest, when the sun shines most intensely on the roof; by opening the windows, the western breezes are enjoyed, and it is therefore never clouded by thick or stagnant air.

At the top of the *xystus*, projecting from the *crypto-porticus*, is the *diætæ* of the garden, and these are my delight; for here in truth, have I placed my affection. In this is an *heliocaminus*, (an apartment made warm by the sun) one side of which looks to the *xystus*, the other to the sea, and both to the sun. From the folding doors, is seen the *cubiculum*, from the windows, the *crypto-porticus*; on the side next the sea, and opposite the wall, a very elegant *zotheca* (a closet or small room), recedes, to which a *cubiculum* is either added, or separated, by means of glazed windows and curtains. Here are contained two chairs

and a bed, from the foot of which, you have a prospect of the sea; from the back, of the neighbouring Villas; and from the head, of the woods: each window giving a particular prospect, which may be seen either together, or separately. Adjoining is a *cubiculum*, for night and sleep; for here neither the noise of servants, the murmurs of the sea, the roaring of tempests, the glare of lightning, nor even the light of day is perceived, till the windows are opened; but all is profound silence, which is caused and preserved by an *andron*, (an open court, or space), which is between the wall of the *cubiculum*, and that of the garden; so that all noise is drowned by the void space between.

Close to the *cubiculum*, is a small *hypocaustum*, (stove), the heat from which, by a small window, may be regulated at pleasure. Thence a *procæton* and *cubiculum* extend into the sun, where it is enjoyed though obliquely from its rise, till after mid-day.

When retired to these apartments, I seem as absent from my Villa; I receive great delight here, particularly in the time

of the Saturnalia, when the other parts of the Villa, by the accustomed freedom allowed at those times, resound with festive clamours; for here, I neither obstruct the diversions of my servants, nor they my study.

These conveniences, these pleasures, are deficient in falling water, yet near the surface are wells, or rather springs, &c.

PLINII, Epist. lib. 2, Ep. 17.

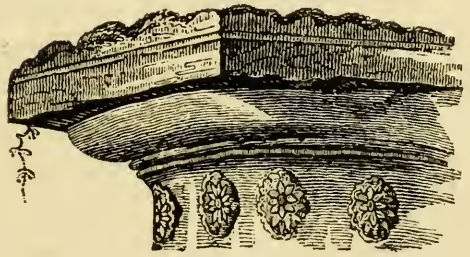
This copious description conveys a pretty accurate idea of the extent of a Roman Villa, its numerous apartments, with various and multiplied conveniences; in the description of Tuscum, by the same Pliny, which merits to be called in modern language, a Mansion, more than a Villa, being surrounded by an extensive domain, and distant from Rome, (one hundered and fifty miles); here apartments more numerous, and of greater elegance, are described; and the garden, or pleasure grounds, were more abundantly accommodated with extensive buildings, and conveniences; nor were these two Villas all which were possessed by the Consul, for he writes to a friend, I prefer my Villa of *Tuscum*, to

those of *Tusculum*, *Tybur*, and *Prænestc*. These three, as well as Laurentinum, were in the vicinity of Rome. On the borders of Lake Larium, (his native place, now called Lake Como, on the confines of Switzerland), in Epist. 7, lib. 9, he mentions having several seats; two of which afforded him particular delight; and from their solemn and gay situations, he called one Tragedy; the other he called Comedy; from one out of the bed-chamber, almost from the bed, you might angle in the lake below.

Of neither of these villas are there any remains. What has been traced of the Tyburtine villa of Adrian, according to the plans published by Piranesi, shew it to have been of an amazing extent; here was, each upon a grand scale, an *Hippodrome*; a *Naumachia*, a *Theatre*, a *Palæstra*, a *Nymphæum*, a *Castle*, for a guard, with a temple to Mars; a *Piscina*, a *Bibliotheca*, a *Stadium*, a *Vestibulum*, of various apartments, (being the entrance to the baths, Stadium, &c. &c.) *Baths*, a *Pretorium*, a *Pinacotheca*, an *Hospitalia*, for visitors; a *Canopum*, an *Accademia*, an

Odeum, and *Theatre*, a *Lyceum*, a *Palace*, for the Emperor; with many other buildings: each of which were accommodated with various apartments, fitted up in a style of elegance and grandeur, scarcely credible; this truly princely palace occupied an extent of ground above three miles in length.

The Villa of Mecænas, in the neighbourhood of Tivoli, was also very extensive, and not less elegant.



A

DICTIONARY OF TERMS

USED IN

ARCHITECTURE.

DICTIONARY.

ABA A ADY.

Abacus, the upper member of a column, which serves as a covering to the capital. To the Tuscan, Doric and ancient Ionic, it is square; to the modern Ionic, Corinthian and Composite, each side is arched, or cut inwards, and is decorated in the centre with a flower or other ornament. See Plates 9, 10.

Acanthus, a plant, whose leaves form an ornament in the Corinthian and Composite capitals, and are said to have originally given rise to the former order.

Acroteria, a kind of base, placed on the angles of pediments, usually for the support of statues, &c.

Adytum, a sacred place in a temple, where none but priests were allowed to

enter, answering to the *Sanctum Sanctorum* of the Jews.

Alæ, Ailes, also passages in theatres, houses, &c. also in rooms, &c. the space between the walls and the columns.

Amphiprostyle, *i. e.* double prostyle, or having pillars on both fronts; according to Vitruvius, the third order of temples. See page 59.

Amphitheatre, a place for exhibiting shows, very spacious, of a round or oval figure, with many seats rising on every side. The area in the middle was called *Arena*, because it was covered with sand, or sawdust, to prevent slipping, and to absorb blood. It was also called *Cavea*, because surrounded by the caves, or dens, in which the wild beasts were kept. The *Arena* was surrounded by a wall of twelve or fifteen feet in height, the top of which formed a parapet or defence to the front seat, which was therefore called *Podium*. The seats were distributed, the same as in a theatre. The entrance to the seats was called *Vomitoria*, the passage by which to ascend to the seats *Scalæ*, or *Scalaria*, and the

seats between two passages, from the wedge-like form, was called *Cuneus*; these as well as theatres, were originally, only temporary, and of wood; many were afterwards built of stone. Rome had several; the principal, was that built by Titus, called the *Coliseum*, which was large enough to contain eighty-seven thousand persons.

ANDRON, a passage, open space, or court.

ANNULET, a small square moulding, which serves to crown or accompany a larger, and to separate the flutings in columns. See Plate 8.

ANTEPAGMENTA, the outer and ornamented covering to the jambs and lintel of a door case, now called *Architrave.*

ANTÆ, a species of pilasters on the extremity of a wall usually having no diminution, nor do the mouldings of their capitals or bases always resemble those of the columns.

ANTÆ or *Antis*, i. e. pilasteral; according to Vitruvius, the first order of temples. see page 58.

APOPHYGE, that part of a column where

it begins to rise upwards out of its base.

Apotheca, a cabinet, or store closet.

Aquæduct, an artificial canal, built for the conveyance of water from one place to another, either running under ground, or rising above it. The Romans built very magnificent aquæducts, some of which passing through rocks and mountains, and over vallies, brought water to Rome, from the distance of sixty miles; their height in some places more than one hundred and nine feet; raised on two or three tiers of arches. The water brought to the *(Castellum)*, reservoirs, in the city, was copiously distributed to all parts by pipes. *Frontinus* has left a treatise on the subject, wherein are described nine aquæducts; others were afterwards added.

Arch, a part of a circle or other curve.

Araeostyle, according to Vitruvius, the fourth method or species of intercolumniation, to which four diameters are allowed between each column. See page 65.

Architrave, the lowest principal member of an entablature, lying immediately upon the abacus of the capital. See Plates 9, 10.

Astragal, a small round member resembling a ring, which terminates the extremities of the column; which is sometimes applied at the lower edge of the architrave, in modern works. See Plate 8.

Attic Base. See *Base*. See Plate 7.

Atrium, a hall of entrance to houses of the ancients. The Pantheon at Rome served as a Vestibule or Atrium to the Baths of Agrippa. The Atrium was sometimes considered as a place sacred to religion; here were the statues of their ancestors; and here they paid their devotions to the household gods. In Villas, where space could better be allowed, the *atrium* resembled most a spacious fore court.

B.

Baluster, small columns or pillars of wood, stone, &c. used on terraces or

tops of buildings for ornament, and as a railing, and, when continued, form a *balustrade*.

Band, a general term for a low, flat, or square member.

Base, the lower and projecting part of a column and pedestal. See page 47. See Plates 7, 10.

Basilica. See *Forum*.

Baths, *Thermæ*, Rome was supplied with a vast number of baths, (more than eight hundred), for public use; of these, some were of extent and magnificence almost exceeding belief, did not the remains of those of Titus, Dioclesian, Antoninus, &c. fully answer the records of history; they had principally this disposition—to be turned from, or sheltered from the north and north-east. These stately buildings contained porticos, walks, groves, fish-ponds, tennis courts, halls, and an infinite variety of apartments, for undressing, sweating, and other uses: these were adorned with the most valuable marbles; Jasper, Alabaster, and Porphyry, ornamented with paintings of the most costly and vivid colours, heightened with gold; the floors were of

Mosaic work; the perfumes of Arabia abounded; the water conducted through pipes of silver, fell into cisterns of silver: and as much time was spent by the Romans in bathing, and great numbers of people resorted to the baths, they became what we call a lounging place; for here poets sometimes read their composition, and studious men used to compose, hear, dictate, &c. The baths of Dioclesian are reported to have had accommodations for eighteen thousand bathers. The names of the bathing apartments were, *Frigidarium*, the cold bath; *Calidarium*, the hot; and *Tepidarium*, the tepid: the stove room, *Hypocauston*; the sweating room, *Sudatoria*; the undressing room, *Apodyterium*; the perfuming room, *Unctuarium*.

Bossage, a term used for any stone laid with a projection beyond the upright of a building, to be afterwards cut into mouldings, or other ornaments; it is also used for rustic work, because the rustics project over the perpendicular of the building.

Bricks, the ancients used three sorts,

one which the Greeks call *Didoron*, which are such as the Romans use; they are a foot and half long, and a foot broad; the other two sorts are used in the buildings of the Greeks; one of which they call *Pentadoron*, the other *Tetradoron*; these bricks, therefore, which have on every side five palms, are called *Pentadoron*; and those which have four, *Tetradoron*; in public works they use the former, and in private the latter: of these bricks they make half bricks; and in working, the whole bricks are placed in one course, and the half bricks in the other; so that when both parts are built to a level, they appear to be laid in the walls with alternate faces outward; the middle of the brick being disposed perpendicularly over the joints, giving strength, and not an unhandsome appearance to both parts.—*Vitruvius*. Pliny says they were all one foot broad, and differed in length only. No idea is here given of their thickness; they were made rather thin, almost like our ten-inch tiles; as may be seen in that remnant of a Roman

building, within the walls of Dover Castle, and in many other remains of Roman structures in England.

BUTMENT, a supporter, or prop, on or against which the feet of arches rest.

BUTTRESS, a kind of butment, built sometimes archwise, as to Gothic buildings; a mass of stone or brick work, serving to prop or support buildings, walls, &c. on the outside, where their great height or weight require additional strength.

C.

CALIDUCTS, pipes or canals, disposed in or along the walls of houses, for conveying hot air to distant apartments, from a common or cental furnace, as practised by the ancients.—This method has been adopted in modern buildings, with success and œconomy.

CANOPUM, aTemple to the Egyptian God *Canopus*, which from the story related by Suidas, represented the element water.

CAPITAL, the uppermost member of a column, which is as a crown or head thereto, placed immediately over the *shaft*, and under the *architrave*; no co-

lumn is complete without a capital, which has a distinguishing character for each order.—Tuscan and Doric capitals consist of mouldings; Ionic of volutes; Corinthian, and Composite capitals, of leaves and other ornaments.

Cartouche, an ornament in sculpture representing a scroll of paper, &c.

Caryatides, a kind of order in Architecture, in which a female figure is applied instead of a pillar: the origin of which is thus handed down by Vitruvius: the inhabitants of Caria, a city of Peloponnesus, made a league with the Persians against their own nation; but the Persians being worsted, they were afterwards besieged by the victorious party, their city taken and reduced to ashes, the men put to the sword, and the women carried away captives. To perpetuate the memory of this victory, the conquerors caused public edifices to be erected, in which, as a mark of degradation and servility, the figures of the captives were used instead of columns, thus handing down to posterity their merited servility and punishment. When

figures of the male sex are used, they are called *Persians* or *Perses*.

CATADROME, an engine of the ancients. like a crane, used to raise great weights.

CAVÆDIUM, an open court, or void space within the body of a house.

CAVETTO, a concave moulding of one quarter of a circle. See Plate 8.

CAULICOLI, the little twists or volutes under the flower on the abacus in the Corinthian capital, represent the twisted tops of the acanthus stalks ; are called also *Helices*.

CELL, in an ancient temple, is the inclosed space within the walls.

CINCTURE, a ring, list, or fillet, at the top and bottom of the shaft of the column ; that at the bottom is called *Apophyge* ; the top one is called *Annulet*, or *Astragal*.

CIRCUS, the length of the *Circus maximus* was three stadia, (or furlongs), and a half ; the breadth a little more than one stadium ; so that the extreme circumference was more than one mile. In the middle, for almost the whole length was a wall, called *Spina*, twelve feet

broad, and four feet high ; ornamented with various trophies, statues, &c. This Circus was originally built by Tarquinius Priscus, and was greatly enlarged and beautified by the Emperors ; Julius Cæsar adorned it with porticos three stories high, and encompassed the inside with a canal, called *Euripus*, ten feet wide. The seats were in the same form as in the theatres, and were sufficiently spacious to hold one hundred and fifty thousand persons. Augustus added on the middle of the Spina, an obelisk of Egyptian granate, one hundred and thirty-two feet high ; he also enlarged it so, that it would accommodate, according to the report of Pliny, two hundred and fifty thousand persons. There were other Circi at Rome ; particularly those of Flaminius, Nero, Caracalla, Severus, &c.

Cœnatio, a supper room ; these were smaller than the *Triclinium*, or Æcos, and were perhaps what we call the common sitting room or parlour.

Collarin, or *Collarino*, the neck or frize of a Tuscan or Doric capital.

COLONNADE, a series or continuation of Columns.

COLUMN, a round pillar used in Architecture, to adorn or support. Columns are of five kinds; the *Tuscan, Doric, Ionic, Corinthian,* and *Composite,* each of which has its particular proportion. The term includes the base and the capital.

COMPOSITE *order,* one of the five orders of Architecture.

CONGE, a small moulding, which serves to separate larger ones, called also *List,* or *Annulet.*

CONSOLE, an ornamented block projecting from the wall to support a bust, &c. and is frequently seen cut on the key stone of arches; it is also used sometimes under a cornice to doors, windows, &c.

CONTOUR, the outline of a figure, or piece of Architecture.

COPING *of a Wall,* the top or covering made sloping to throw off water.

CORBEILLE, carved work, representing a basket with fruits or flowers, serving as a finish to some other ornament. It sometimes is applied to the vase of the

Corinthian capital, the word originally meaning a basket.

Corinthian *order*, one of the five orders of Architecture.

Cornice, the upper assemblage of members in an entablature, commencing at the frize; each order has its particular cornice, with suitable enrichments. To the *Tuscan* it is quite plain; to the *Doric* are added mutules; the *Ionic* has denteles; the *Corinthian* modillions; the *Composite* has both denteles and modillions. See plate 9, 10.

Corona, a large flat and strong member in a cornice, called also the *Drip*, or *Larmier*; its use is to screen the under parts of the work, and, from its shape, to prevent the water running down the column; it has always a large projection to answer its proposed use. The under, or horizontal part of the corona, is called the *Soffit*, and admits of various degrees of ornament, according to the richness of the order.

Corridor, a gallery or passage in large buildings, which leads to distant apartments.

Crypto-porticus, a vaulted, subterraneous or obscure place; also an enclosed or private porticus, in dwelling houses, for exercise, walking, &c. in bad weather.

Cupola, a round roof or dome, in the form of an inverted cup.

Cubiculum, a room, or bed-chamber.

Curia, the hall or apartment in which the legislature, or principal persons of any district or parish (*curiæ*), assembled, both for religious and civil purposes, and in principal cities, was near the forum. The word is used now for courts of justice, and legislature.

Cyma, *Cima*, or *Cymatium*, a species of moulding, which is generally the upper one to an entablature. There are two sorts of this moulding, the *cyma recta*, and *cyma reversa*. See plate 8.

D.

Decastyle, in ancient Architecture, a building with ten columns in front.

Dentele, an ornament resembling teeth, used in the Ionic and Composite cornices.

Diastyle, according to Vitruvius, the third species of intercolumniation, having three diameters between the columns.

Diæta, a set or suit of apartments; but no determinate number of rooms.

Die, the square or naked piece in a pedestal, that part which is between the base and the cornice. See Plate 10.

Dipteros, *i. e.* having a double range of columns; according to the arrangement of Vitruvius, is the sixth order of temples.

Dome, a spherical roof. See *Cupola.*

Doric *order*, one of the five orders of Architecture.

Doors of the ancients were commonly raised above the ground; were made of wood, brass, or iron; and, to temples, of ivory and gold. Folding doors, were called *valvæ*, the doors opened inwards, unless otherwise permitted by especial law: as to P. V. Publicola, and his brother, who had twice conquered the Sabines; but the Greek mode was to open to the street, and when any one went out, he knocked on the inside, to

give warning to those without, to take care; the most ancient doors were narrower at top than at bottom: they had doors of two, three, and four leaves or folds.

DRIP. See *Corona*.

DROPS or *Guttæ*, in the Doric entablature, are small pyramids or cones, immediately under the triglyph and mutule.

E.

ECHINUS, is properly the egg and anchor ornament peculiar to the *Ionic* capital: it is sometimes used for the whole moulding instead of *ovolo*.

ENCARPUS, used to express festoons of fruits or flowers on frizes, &c. literally means fruit only.

ENTABLATURE, an ornament or assemblage of parts, supported by a column or pilaster over the capital: each order of columns has a peculiar entablature divided into three principal parts; the *architrave*, which is divided into two or more *facia*, and rests upon the capital. The *frize* is next, and may be plain or

ornamented. The *cornice* is the top or crowning part. See plates 9, 10.

Epistyle, the same as architrave.

Eustyle, according to Vitruvius, the fifth and most eligible method of intercolumniation, having two diameters and a quarter between the columns.

Exhedra, in ancient architecture, a large recess, where company used to retire for conversation, &c. in extensive buildings was a distinct apartment

F.

Facade, the front view or elevation of a building.

Facia, a flat member in the entablature of an order, representing a band or broad fillet in an architrave ; if divided, these divisions are called the first facia, the second facia, &c. See Plate 9.

Fastigium, the name used by Vitruvius for what we call a *pediment*.

Fillet. See *Annulet*.

Flutings, the hollows or channels, which are cut perpendicularly in columns by way of ornament, and which should al-

ways both begin and end in the shaft, near the extremity of the apophyges; though there are examples to the contrary. When flutings are used the capital should be enriched.

Foliage, an assemblage of leaves.

Forum, a market place, where things are sold: also where the courts of justice are kept. The Greeks, says Vitruvius, made their forums square, with large double porticos, the columns close together, adorned with stone or marble cornices, having ambulatories in the upper stories: but the Romans follow not the same method; for, by ancient custom, the shews of gladiators are given in the forum: for this reason the intercolumniations around the area are made wider. In the surrounding porticos the shops of the bankers are disposed; with galleries in the upper floors, properly adapted for the use and management of the public revenue: the proportion to be one third longer than broad. Adjoining the forum, on the warmest side, was the *basilica*; where were large covered halls, with galleries

supported by elegant columns: in these galleries were shops, where the finest wares were sold; in the middle was a large space for the convenience of merchants and men of business; at one end was the *tribune*, where causes were heard, and other public business transacted. In parts of this building also the lawyers or counsellors had apartments. These structures having frequently been converted into christian churches, they, from them, have obtained the name of *basilica*.

Foot. See *Measure*.

Frize, or *Frise*, the middle member of an entablature, having the architrave below, and the cornice above.

Frontispiece, sometimes signifies the whole face or aspect of a building, but is more properly applied to the decorated entrance of a house.

Fust, the shaft of a column, or that part which is between the base and the capital.

G.

GESTATIO, a place in the gardens of the ancient Romans for exercise on horseback, or in a carriage, the form generally circular.

GLYPHS, the perpendicular channels cut in the *triglyphs* of the Doric frize.

GOLA, or *Gula*, a moulding, more usually called *cyma reversa*, or *ogee*.

GORGE, a hollow moulding, a *cavetto*.

GOTHIC Architecture, a style distinct from the Grecian or Roman, although derived from the latter. The early examples are characterized by circular arches springing from massy columns, called the Saxon style; this afterwards merged into the pointed arch of various forms, beautifully ornamented with foliage, &c. wrought with skill and elegance: the early examples of this style are called Norman, and the latter ones Gothic, which are generally much enriched. In England there are many examples of each sort.

GULA. See *Gola*.

GUTTÆ. See *Drops*.

GYMNASIUM, a place for exercise, public or private. See *Palæstra*.

H.

HELIOCAMINUS, a place or room made hot by the heat of the sun; Nero appointed one to be made on the portico before his palace.

HELIX or *Helices*. See Cauliculi.

HEXASTYLE, a temple, &c. having six columns in front.

HIPPODROME, a place where the ancients exercised their horses, also the course for the horse-race.

HORREUM, a Granary, or Repository.

HOUSE, the houses of the ancients had great and magnificent vestibules or entries, which were sometimes two hundred and twenty feet long, and one hundred and sixty broad, supported with two ranges of pillars, which formed a wing on each side. The Greeks and the Romans differed in the distributing and ordering their apartments. The Romans had magnificent courts and entries, but the Greeks only a narrow

entry through which they passed into a peristyle; this entry or passage had on one side the porter's lodge, and on the other the stables. Among the Greeks, the apartments of the women were separate from those of the men, and the latter dined by themselves. See the distribution of ancient houses, farther explained in the former part of this book.

HYPÆTHRAL, *i. e.* uncovered, or open to the sky; according to Vitruvius, the seventh order of temples, and without a roof.

HYPOTRACHELION, the neck or frize of a capital.

I.

IMPOST, a facia or small cornice which crowns a pier or pilaster, and from which an arch springs.

INSULATED, standing alone, or detached from any contiguous building, &c.

INTERCOLUMNIATION, the space between two columns, for the particulars of which, see page 64.

Ionic *order*, one of the five orders of Architecture.

K.

Key-stone, the highest stone of an arch, to which a projection is usually given, and which is sometimes cut in ornaments.

L.

Lacunariæ, pannels or coffers in cielings, or in the soffits of cornices, &c.

Larmier. See *Corona*.

List, or *Listel*. See *Annulet*.

M.

Measure *of length* of different countries being of much importance in examining buildings, and a comparison that could be depended on not being before collected into a convenient form, the following modern measures have been carefully deduced from the best authorities; taking the English foot of twelve inches as the standard:

		Inches.
London	Foot	12.000
Amsterdam	Foot	11.139
Berlin	Foot	12.188
Bern	Foot	11.540
Bologna	Foot	15.014
Cairo	Derah or Cubit	21.888
Constantinople	Great Turkish Pike	26. 4
	Lesser Turkish Pike	25.575
Copenhagen	Foot	12.350
Florence	Braccio	22.925
Genoa	Palm	9.768
Koningsburg	Foot	12.108
Lisbon	Palm	8.603
Madrid	Foot	11.124
Milan	Braccio	23. 60
Naples	Palm	10. 32
Parma	Braccio	21.512
Paris	Foot	12.785
	Metre	39.371
Persia	Arish	38.364
Petersburgh	Archin	27.528
Rhinland.	Foot	12.350
Rome	Palm	8. 82
Stockholm	Foot	11.684
Turin	Foot	12.713
Venice	Foot	13.670
Vienna	Foot	12.516

THE ANCIENT MEASURES.

GREEK.

Palm, Doron, Dochme, or Palaisee	3.022
Foot, Pous	12.09

ROMAN.

Palm, Palmus	2.901
Foot, Pes	11.606

METOPE, the interval or square space between the triglyphs in the Doric frize.

MEZZANINE, or *Mezzetti*, small or low rooms, or stories between principal ones, used as servants' apartments.

MINUTE, an *architectonic measure*, the lower diameter of a column divided into sixty parts, each part is a *minute*. See *module*.

MODILLION, an ornament resembling a bracket, in the Corinthian and Composite cornices. See Plate 9.

MODULE, an *architectonic measure*, the lower diameter of a column divided into two parts, one is a *module*, each module is divided into thirty *minutes*; thus either is not a determinate, but a proportionate measure.

MONOPTERAL, a round temple without a cell. See page 61.

MOULDINGS, those parts which project beyond the face of a wall, column, &c. intended only for ornament, whether round, flat, or curved: the regular mouldings are, 1st, the *list*, or *annulet*; 2d, the *astragal*, or *bead*; 3d, the *cyma*

reversa, or ogee; 4th, the *cyma recta*; 5th, the *cavetto*, or hollow; 6th, the *ovolo*, or quarter round; 7th, the *scotia*; 8th, the *torus*. See plate 8. For general observations on mouldings, their disposition, &c. see page 41, &c.

MUTULE, an ornament in the Doric cornice, answering to a *modillion* in the Corinthian.

N.

NAUMACHIA, the representation of a sea fight, which was at first made in the *circus maximus*, but afterwards elsewhere. Augustus dug a lake for this purpose near the Tiber; and Domitian built a Naval Theatre.

NICHE a cavity or hollow in a wall for statues, &c.

NYMPHÆUM, grottos, or buildings ornamented with statues, fountains, &c. and dedicated to the nymphs. These were perhaps occasionally the entrance to private or retired baths.

O.

Octastyle, an edifice having eight columns in front.

Odeum, a structure built by Pericles, at Athens, for the performance of music. Plutarch says it had within many rows of seats and of pillars. The roof was of a conical figure, after the model of the king of Persia's pavilion.

Œci, halls. See the account of the Roman houses.

Ogee, a *cyma reversa.*

Order, in Architecture, a column entire, consisting of *base*, *shaft*, and *capital*, with an *entablature*. For a particular account of each *order*, see the beginning of this work.

Ova, or *ovum*. See *Echinus*.

Ovolo, a moulding which projects one quarter of a circle, called also a *quarter round*. See Plate 8.

P.

Palm. See *Measure*.

Palæstra, or Gymnasium, a Grecian structure, in its use answering nearly to the *baths* of the Romans; it was more extensive, as being intended principally for bodily exercises, and formed a part of the civil establishment of the Greeks. The first part, as one may say, consisted of a large *Peristyle*; under the porticos were spacious exhedræ, with seats, where the rhetoricians and philosophers taught and conversed. This peristyle, whether square or oblong, was always two stadiæ, or a quarter of a mile in circumference; the fourth portico on the south side was double, to protect from tempestuous weather: in the middle of this portico was the *ephedium*, which is a very spacious exhedra with seats: on each side of which were the baths, hot and cold, with their apartments. Beyond was another peristyle of four stadiæ in circumference; under these porticos, called by the Greeks *Xystos*, the athletæ exercised in the winter season. The area or middle space had groves of trees, called *Xysta-cum Silvis*. At the farther end was the

stadium, made with rising steps, where the numerous spectators stood to see the exercises. Several of these *gymnasia* were at Athens, and other places; the most remarkable, as well for size as elegance, was at Athens, near the river Ilissus, built by Herodes Atticus, of white marble.

PEDESTAL, a square body on which columns, &c. are placed. See Plate 10.

PEDIMENT, a low triangular ornament in the front of buildings, and over doors, windows, &c.

PIER, a kind of pilaster or buttress, to support, strengthen, or ornament; the pier of a bridge, is the foot or support of the arch. The wall between windows or doors. Also square pillars of stone or brick, to which gates to an entrance are hung.

PENTASTYLE, an edifice having five columns in front.

PERIBOLUS, the circuit or wall inclosing the consecrated place where a temple stands.

PERIDROME, the space in a *peripteral*

temple, which is between the column and the cell.

PERIPTERAM, *i. e.* having columns all around; according to Vitruvius, the fourth order of temples; also round temples.

PERISTYLE, a range of columns or colonnade, within a court or building like a cloister: the internal colonnade to the *hypæthral* temple is a *peristyle.*

PIAZZA, an open space for public walks, &c. mostly surrounded by buildings, colonnades, arcades, &c.

PILASTER, a square pillar or column, usually placed against a wall, and projecting one fifth or one sixth of its breadth; has the same proportions and ornaments as a column, but no diminution.

PILLAR, this word is generally used in Architecture, in common with *column,* though, strictly speaking, they are different; thus the supporters in Gothic Architecture are pillars, but can never be properly termed columns, varying in shape and every particular from the latter.

PLAT-BAND, any flat square moulding with little projection; the different facias of an architrave are called plat-bands; the same is applied to the list between flutings, &c.

PLINTH, the lower member of a base. See Plates 9, 10.

PODIUM, a parapet, or fence wall. In the amphitheatre I apprehend this name denoted the front seats appropriated to the senate, foreign ambassadors, the Vestal Virgins, and the Emperor, and was raised twelve or fifteen feet above the arena. Also in a room, that part which answers to a pedestal, and is called the dado.

PORCH, an arched way, or covering at the entrance of a great building particularly to churches.

PORTICO, a continued range of columns covered at top, to shelter from the weather; also, a common name to buildings which had covered walks supported by pillars; having these distinctions, when the portico was on the outside of the building it was called *peripterium*; and when on the inside of a hall, court, &c.

peristilium; the place for walking, *porticus*. Among the ancients these were highly ornamented. and of great extent. The remains of the portico at Palmyra shew it to have been full four thousand feet long. There was a square portico at Athens, whose circumference was fourteen hundred feet, adorned with Corinthian pillars, and a great variety of excellent paintings, and therefore called *poikile*.

Posticum, the porch in the back front of an ancient temple.

Prœceton, an anti-room for attendants, either to wait or to sleep.

Profile, the outline or contour of any building, &c.

Prostyle, *i. e.* having pillars in front only; according to Vitruvius, the second order of temples.

Pronaos, the front porch of an ancient temple.

Pseudo-dipteral, *i. e.* false or imperfect dipteral, the inner range of columns being omitted; according to Vitruvius, the fifth order of temples.

Pteroma, the Greek word for a wall.

Pycnostyle, according to Vitruvius, the first method of intercolumniation, having one diameter and a half between each column.

Pyramid, a structure, which, from a square, triangular, or other base, rises gradually to a point.

Q.

Quarter Round, a moulding. See *Ovolo.*

Quoins, stones or other materials put in the angles of buildings to strengthen them.

R.

Relievo, signifies the proportion of any carved ornament.

Roman *order*, the same as the *Composite.*

Roof, the roofs of the ancients, according to Vitruvius, consisted of the following parts: *Trabes*, a beam, or wall plate; being the timber which is laid upon the walls, columns, &c. to receive and distribute the pressure of the roof. *Cul-*

men, the top or ridge, of consequence the ridge piece. *Columens*, from whence columns derive their name. This must, therefore, be what we call the king-post. *Transtræ*, if the span of the roof is great, these therefore may be considered as large or principal rafters; to these are added *capreoli*, struts, or braces; *canterii*, small or comon rafters, projecting to the extremities of the eaves; *templa*, cross, or longitudinal pieces, which serve to support or strengthen the *asseres*, or laths which support the tiles or covering.

Rotunda, a building which is round both within and without.

Rustic, the term is applied to those stones in a building which are hatched or picked in holes, resembling a natural rough appearance.

S.

Saloon, a lofty, vaulted, spacious hall or apartment.

Scapus, the shaft of a column.

Scima. See *Cyma*.

Scotia, a hollow moulding used in bases to capitals. See plate 8.

Section of a building, represents it as if cut perpendicularly from the roof downwards, and serves to shew the internal decorations and distribution.

Shaft, the trunk or body of a column between the base and the capital.

Soffit, the under part or ceiling of a cornice, which is usually ornamented; the under part of the *corona* is called the *Soffit*; the word is also applied to the ceiling of an arch, the under side of an architrave, &c.

Sphæristerium, a circular court, for playing at ball, or other exercises; a tennis court.

Steps for ascent. Vitruvius regulates their height to about ten inches; but to the ancient temples they are generally higher; to the Doric temples at Poestum they are sixteen, and to one twenty inches high.

Strigæ, the flutings of a column.

Stadia, the same as *hippodrome*.

Stoa, a *portico*. In one of these at Athens, *Zeno* taught his system of phi-

losophy, and instituted the sect named *Stoics*, from the place of their assembling.

STYLOBATUM, the pedestal of a column.

SYSTYLE, according to Vitruvius, the second method of intercolumniation, having two diameters between the columns.

T.

TAILLOIR, the *abacus*.

TALON, a *cyma reversa*.

TEMPLE, among the ancients, according to Vitruvius, there were seven different kinds or orders: see page 58. The word is applied to buildings used to decorate modern gardens, &c.

TENIA, the upper member of the Doric architrave; a kind of *listel*.

TETRASTYLE, a building with four columns in front.

THEATRE. The Theatres of the ancients were of a semicircular form, the benches or seats *(cunei)* rose above one another, and were distributed to the different orders, in the following manner: The

foremost rows next the stage, called *Orchestra*, answering to our Pit, were assigned to the senators, and ambassadors of foreign states; fourteen rows behind them to the *equites* or knights; and the rest to the people. That part which we call the stage, had this division; *Scena*, the scenes, which were adorned with columns, statues, pictures, &c. according to the nature of the play exhibited. *Postscenium*, the place behind the scene, where the actors dressed, &c. *Proscenium*, the place before the scene, called also, the *pulpitum*, where the actors played, and the *chorus* came to rehearse, answering to our stage. In the Greek Theatres, the *orchestra*, which included a very large space, made part of the scene, and here the actors danced: the proscenium, being very shallow or small. But in the Roman Theatres, this part was assigned to the senators, &c. there was a kind of canopy, or covering, stretched over the seats, to shelter from heat or rain, called *peplus*.

THEATRES were, for a long time, of

wood, and without seats: Pompey first erected a theatre of stone, which would contain forty thousand people; and to avoid the animadversion of the Censors, he dedicated it as a temple to Venus the Conqueress; and so contrived it, that the seats of the theatre might serve as steps to the temple. The temple being so placed, that those who came to the shows might seem to come to the worship of the goddess. There were afterwards several others built, one by Balbus; and another dedicated to Marcellus; which was large and very handsome, as appears by its remains. Adjoining this theatre, behind, and round the stage end, was a large double portico, where the spectators took shelter in very bad weather.

Of the *Vases* of the theatre, their theory and construction are to the moderns entirely unknown: but to investigation, their history is nevertheless curious: all we know of them is, what Vitruvius reports, which is as follows: "of the *brasen vases*, which are used on account of the magnitude of theatres,

they are so formed, that upon being struck, they sound in themselves the notes *diatessaron*, *diapente*, and so in order to *disdiapason*; after which they are disposed according to the laws of music, in cells, formed within the seats of the theatre in such a manner, as not to touch the wall, and have a vacancy all round them, to the top of the cell. They are situated inversely, and on the side which is turned toward the scene, they are supported by wedges, not less than half a foot high: also opposite the cells, in the beds of the lower seats, apertures are left, two feet long and half a foot high. Rome has not any theatre thus constructed; but the provinces of Italy, and many cities of Greece, can shew them. Lucius Mummius, who destroyed the theatre of Corinth, brought to Rome the vases of brass; and which were used at the plays acted in his triumph: likewise many ingenious architects, who construct theatres in small towns, to save expence, make use of *earthen vessels* to help the sound, which being adjusted according to rule, answer the purpose."

TONDINO, an *astragal.*

TORUS, or *Tore,* a large semicircular moulding, used in the base of columns. See Plate 8.

TRABEATION, the entablature.

TRICLINIUM, a dining room.

TRIGLYPH, an ornament peculiar to the Doric frize. See Plate 10.

TROCHILUS, the *scotia.*

TURRIS, a tower; in civil Architecture a pavilion, or garden temple.

TUSCAN *Order,* one of the five orders of Architecture.

TYMPAN, the flat surface or space within a pediment.

V.

VASE, the body of a Corinthian capital, also an ornament used in Architecture, &c.

VAULT, an arched roof, the stones or materials of which are so placed as to support each other.

VESTIBULE, the entrance to large houses; the part under the portico.

VOLUTE, the scroll or spiral horn, used in Ionic and Composite capitals.

X.

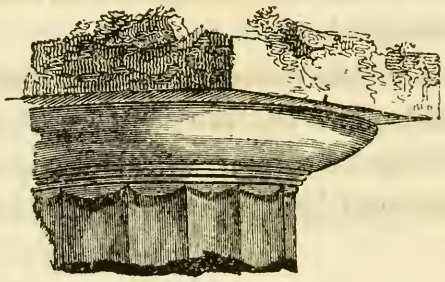
Xyst, a large court with a portico on three sides, planted with rows of trees, where the ancients performed athletic exercises—running, wrestling, &c. See *Palæstra.*

Z.

Zocle, or *Zoccolo*, a low square member, which serves to elevate a statue, vase, &c. also when a range of columns is erected on one continued high *plinth*, it is called a *Zocle* ; it differs from a pedestal, being without base or cornice.

Zotheca, a small room, or alcove, which might be added to or separated from another, by means of curtains and windows. See *Pliny's description of Laurentinum.*

Zophorus, the frize.



OF THE VIGNETTES.

Page 17. An Idea of a primitive Hut, which shews the Origin of Columns, and some other Parts peculiar to early Examples of original Architecture and antique remains.

Page 57. The Fascade of the Temple of Clitumnus, situate on the river of that name, near to Trevi, in Italy. This elegant little temple is of the Corinthian Order, and built of white marble; two of the columns are fluted in a spiral direction, as mentioned in the History of the Orders; the other two are ornamented with a rich foliage; the whole of admirable workmanship, as reported by Palladio, who has given plans and elevations of it.

Page 70, shews the Construction of an ancient Roman Wall. The lower part is the reticulated work, *reticulatum opus;* the upper is a course of brick-work to give strength to the wall; the bricks are triangular, the better to lay hold of the ruble-work, *emplecton*, behind; the brick on the left hand side is an oblong square and larger, to strengthen the bonding of the whole. The face of such walls, was usually covered with plaster or stucco.

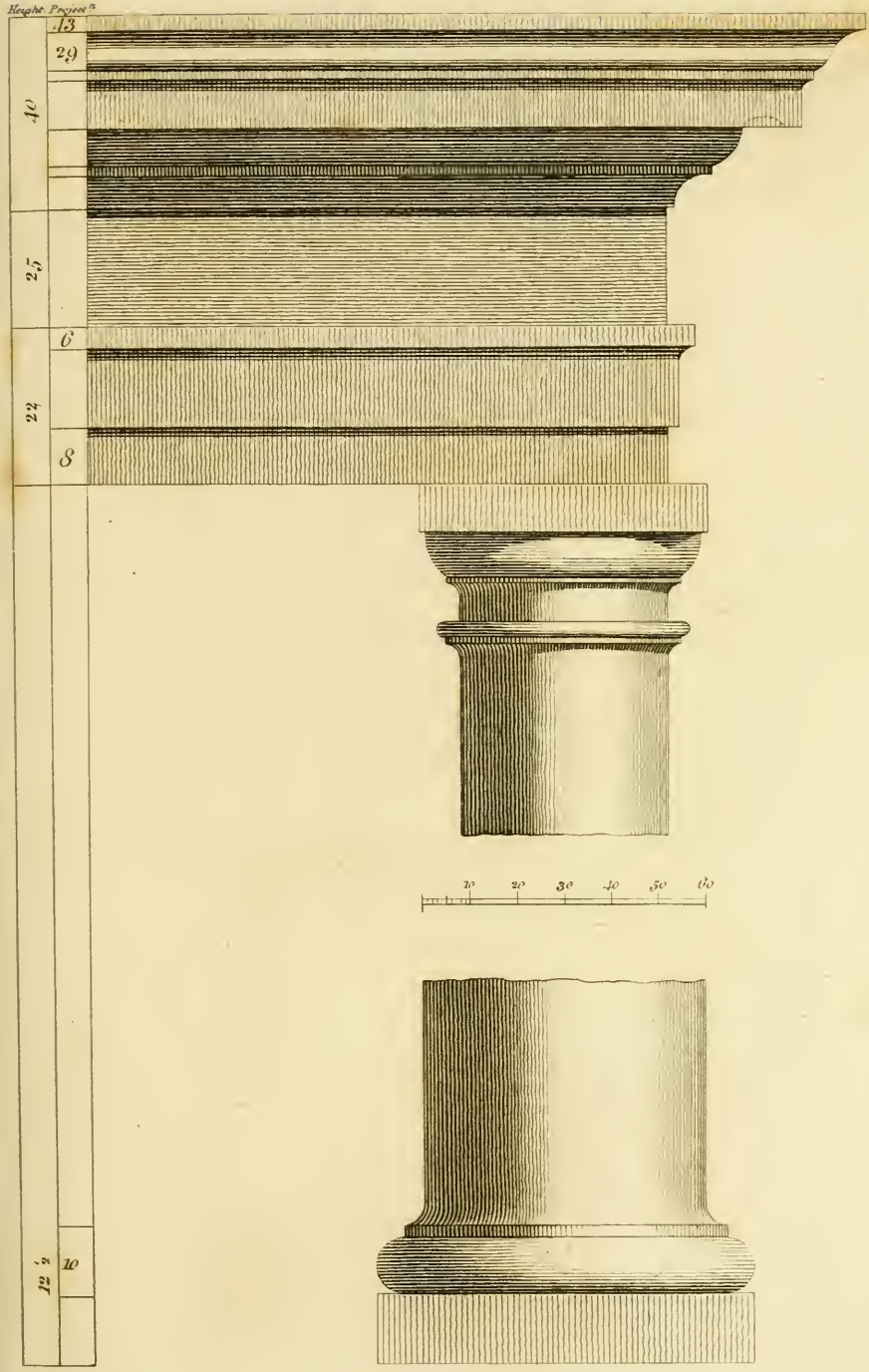
Page 89, is a Sketch of an antique Roman Doric Capital at Rome.

Page 134, Sketch of a Greek Doric Capital from the Temple of Minerva at Athens.

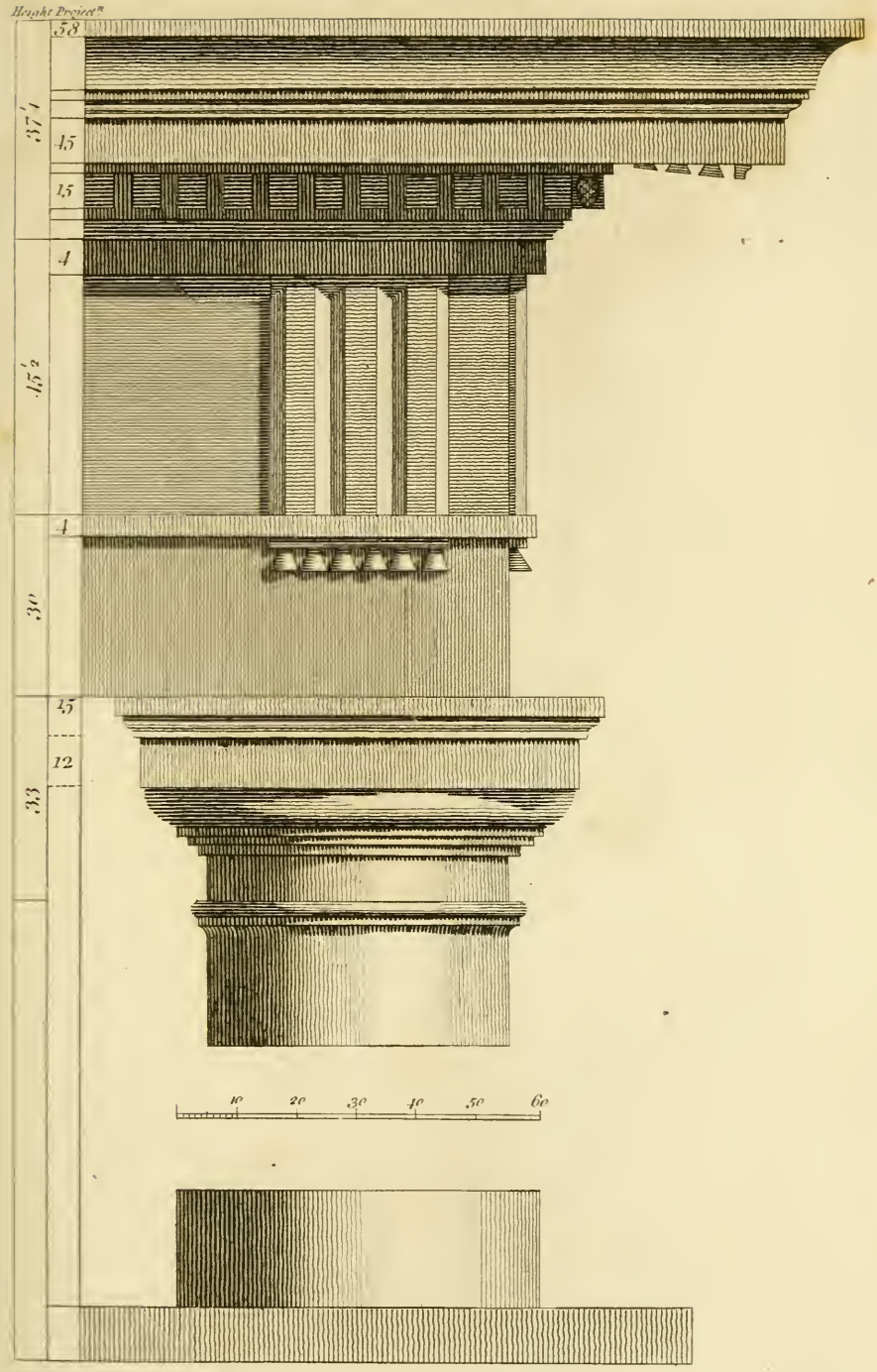
FINIS.

Heseltine, Printer, Checquer Yard,
Dowgate Hill, London.

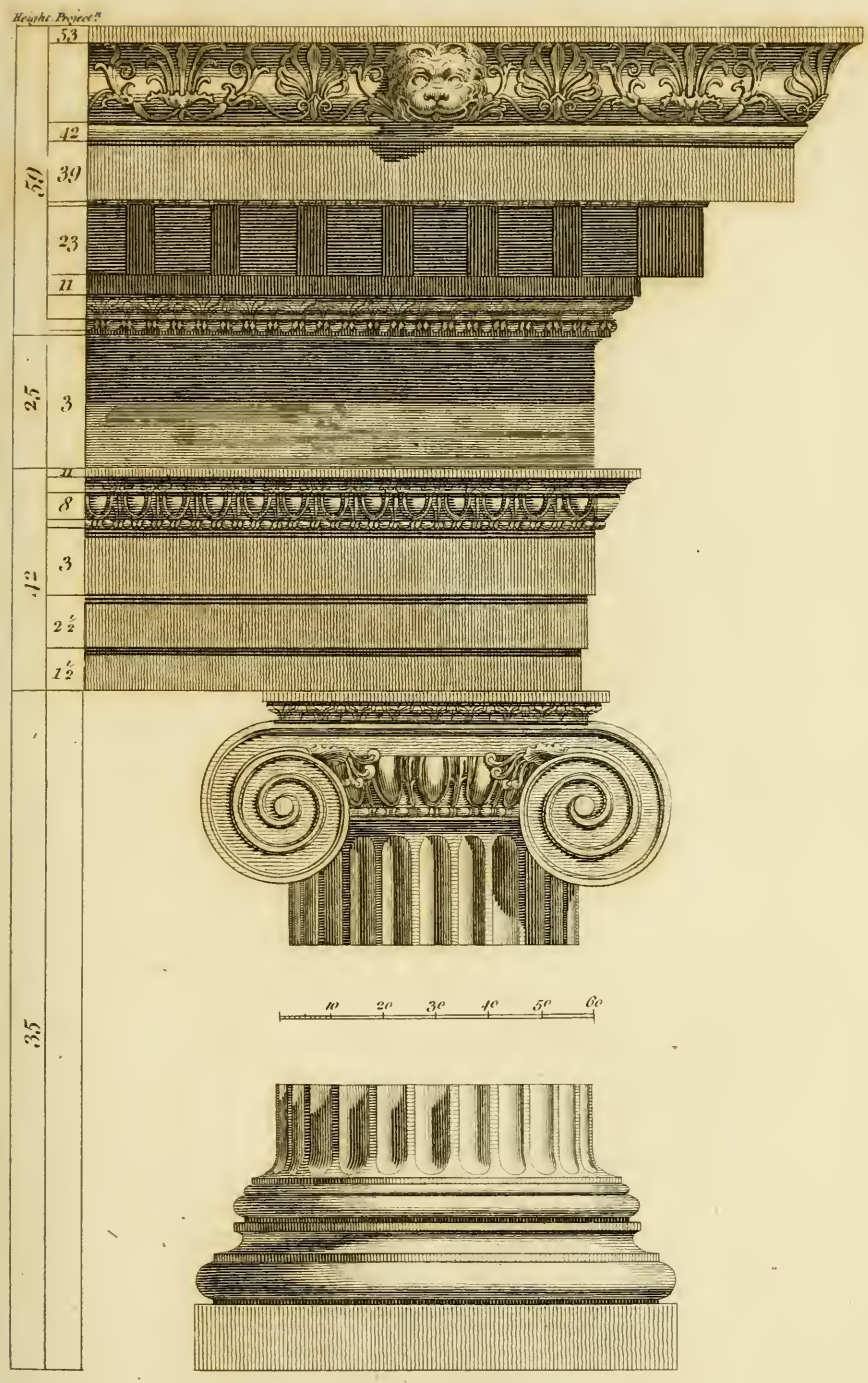
TUSCAN.



DORIC.



IONIC.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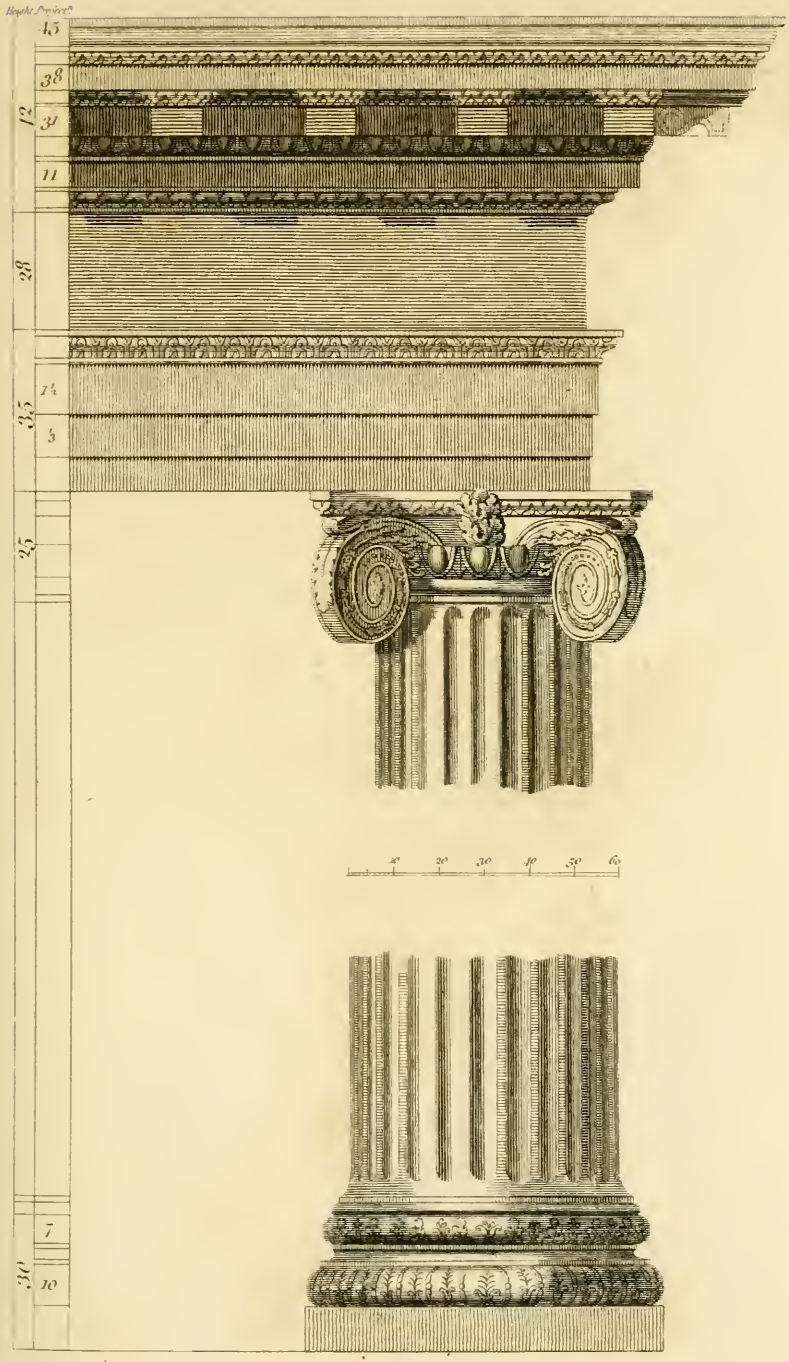
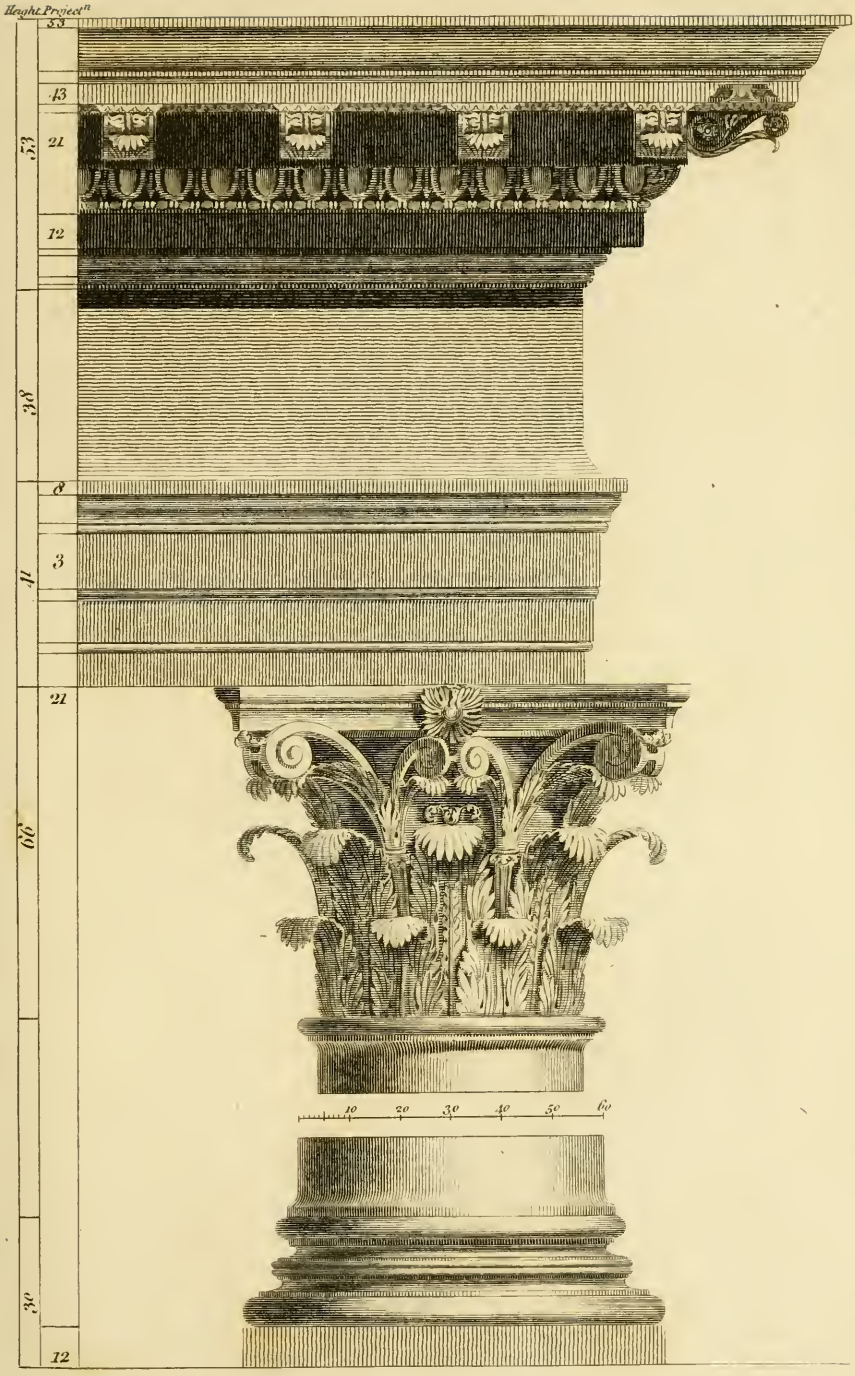
MODERN IONIC.



CORINTHIAN.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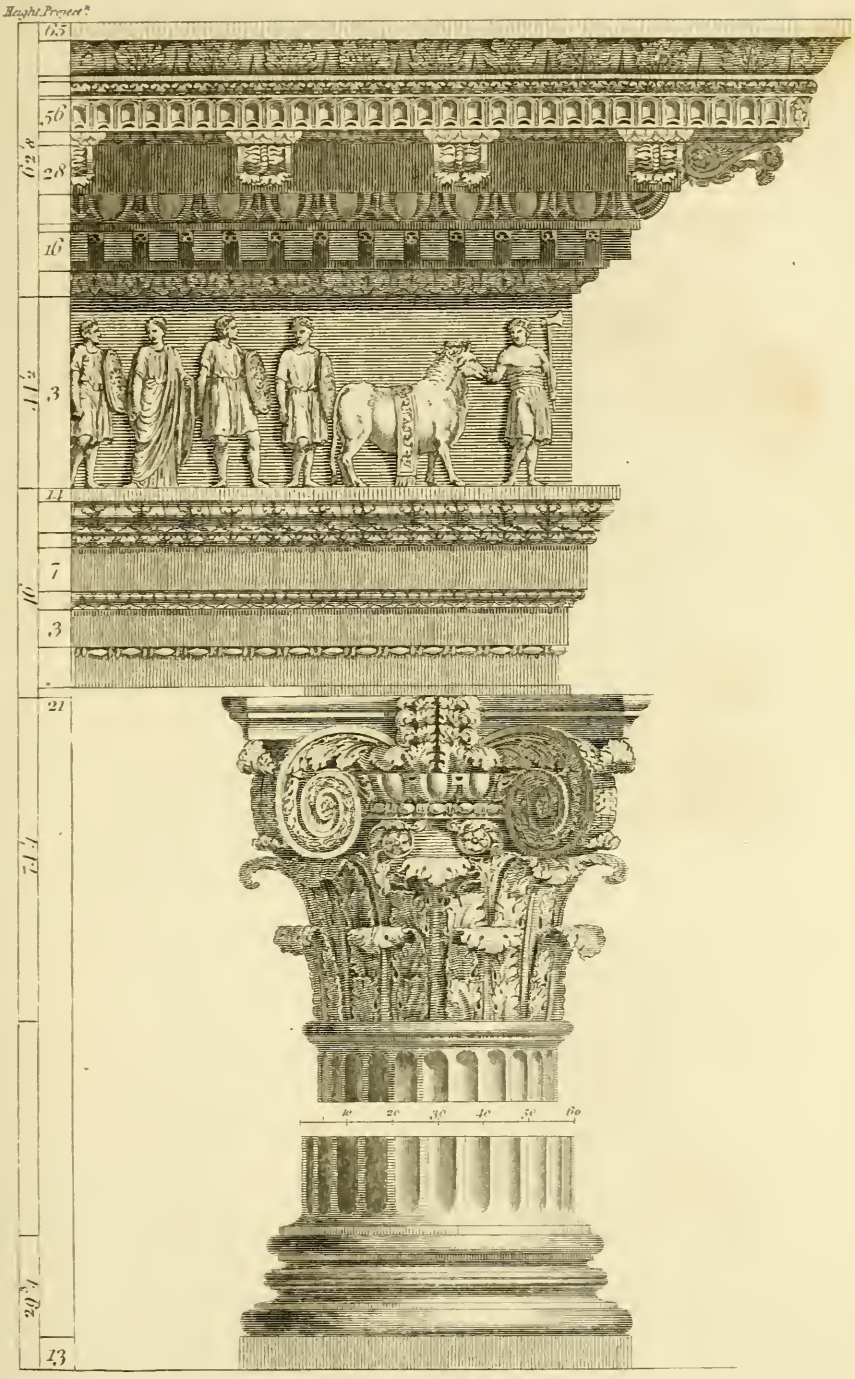
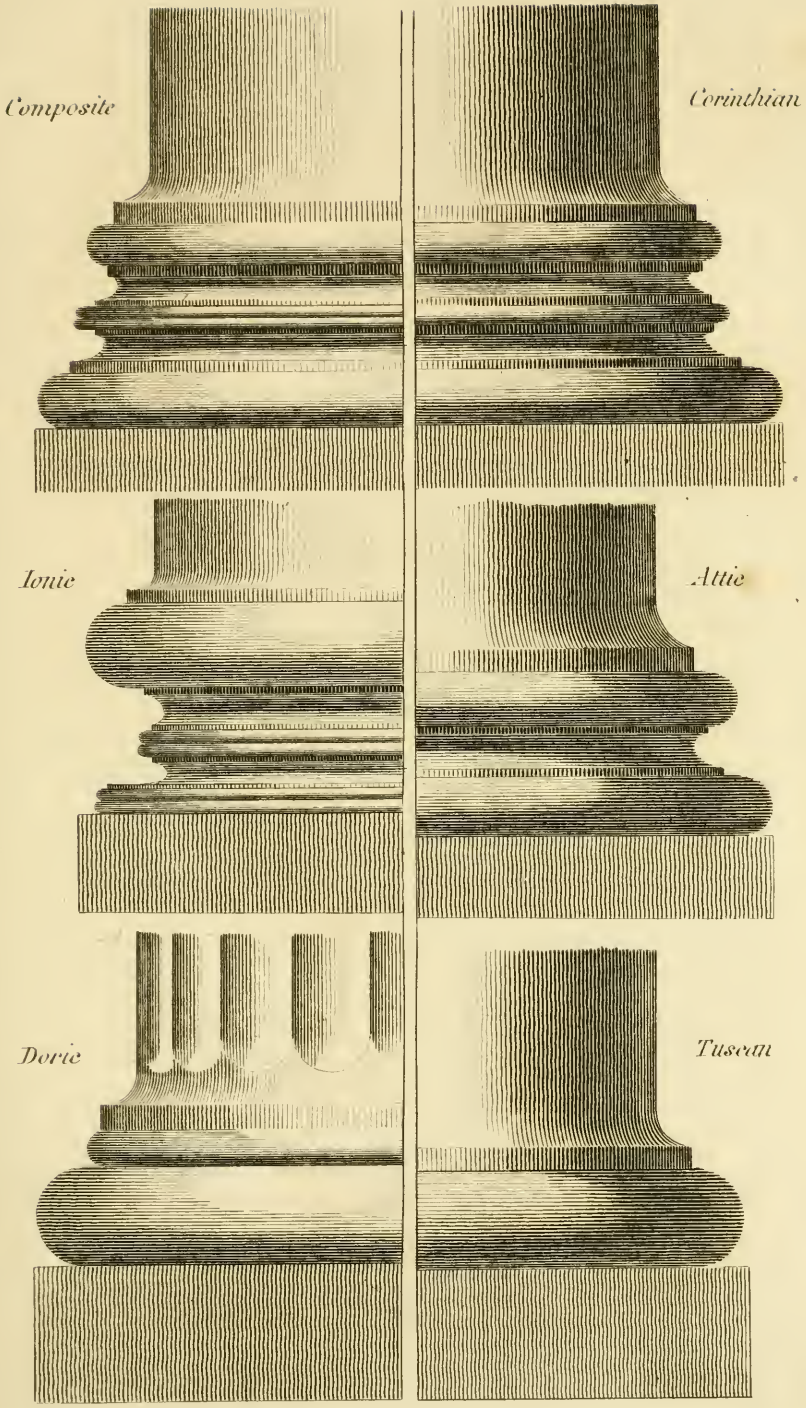
COMPOSITE.



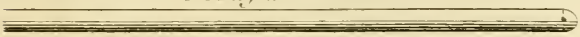
BASES.



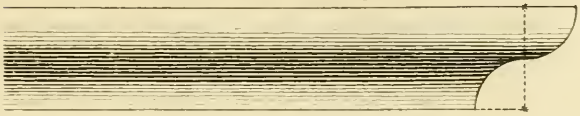
MOULDINGS.

Annulet, List or Square.

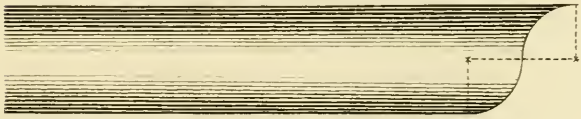
Astragal or Bead.



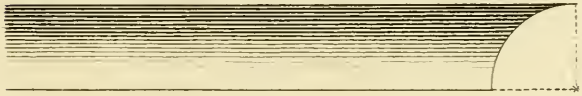
Cima reversa or Ogee.



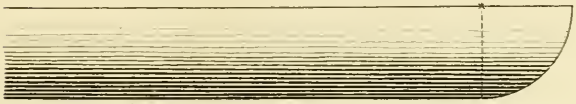
Cima recta.



Cavetto or hollow.

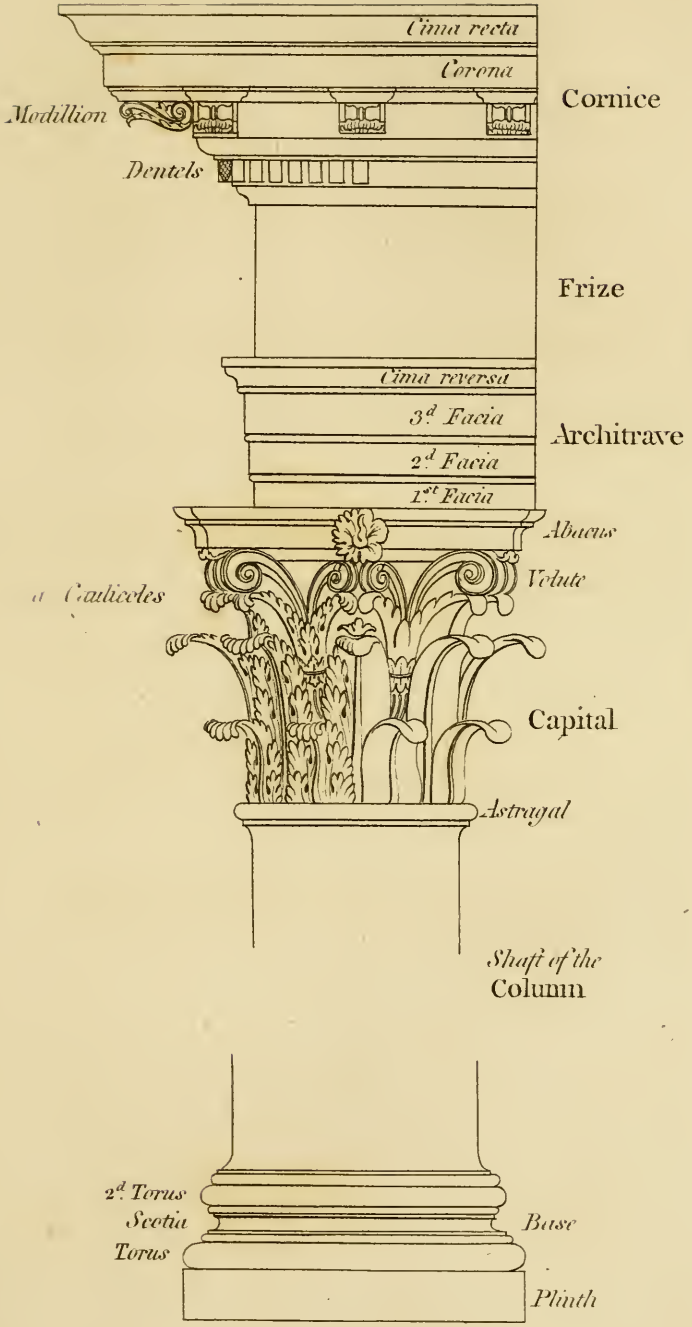


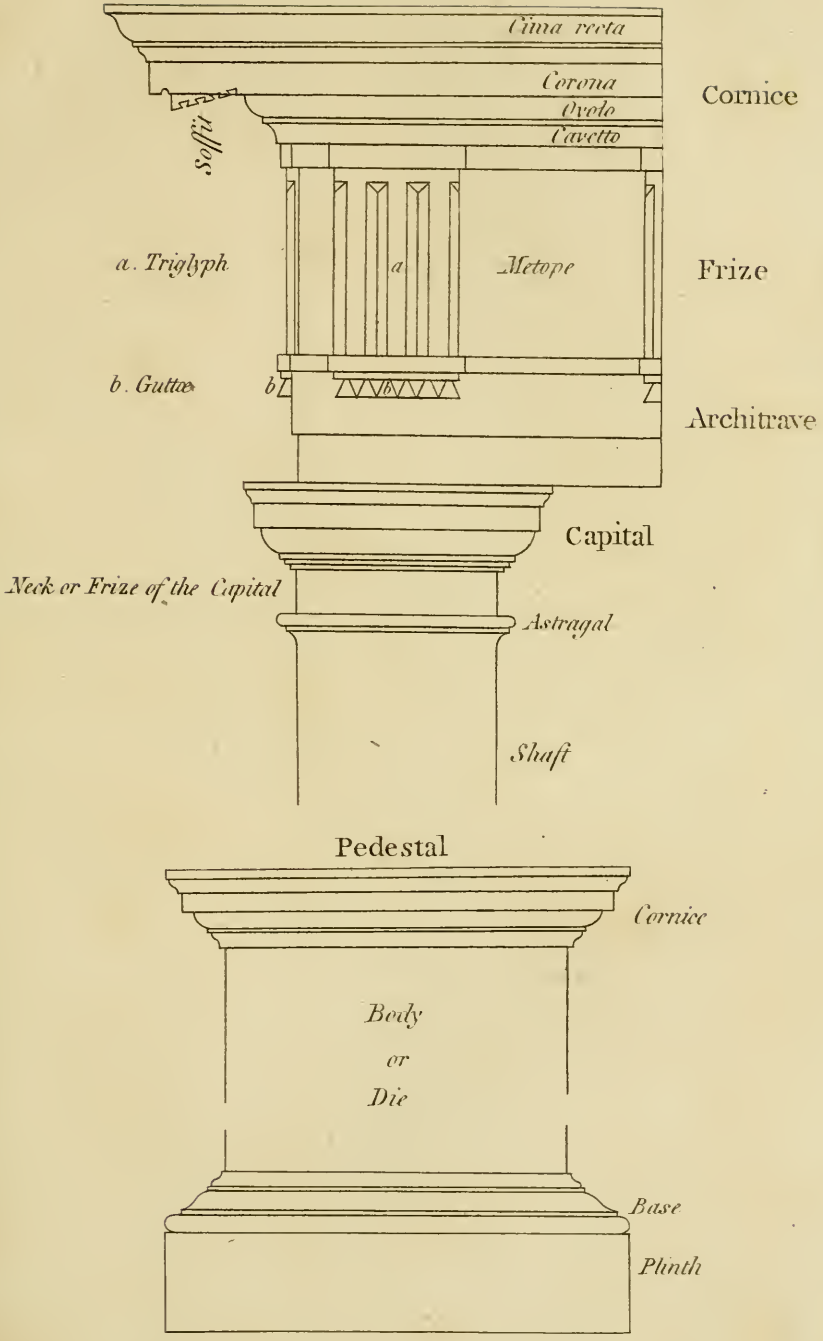
Ovolo or Quarter round.



Scotia.

Torus.


Cima recta
Corona
Modillion
Cornice
Dentels
Frize
Cima reversa
3.d Facia
2.d Facia
Architrave
1.st Facia
Abacus
Volute
a Caulicoles
Capital
Astragal
Shaft of the
Column
2.d Torus
Scotia
Torus
Base
Plinth


Cima recta
Corona
Ovolo
Cavetto
Cornice
Soffit
a. Triglyph
a
Metope
Frize
b. Guttæ
b
Architrave
Capital
Neck or Frize of the Capital
Astragal
Shaft
Pedestal
Cornice
Body
or
Die
Base
Plinth

INSERT FOLDOUT HERE

ESSAYS

ON

GOTHIC ARCHITECTURE,

BY THE

REV. T. WARTON,
REV. J. BENTHAM,
CAPTAIN GROSE,
AND THE
REV. J. MILNER.

(WITH A LETTER TO THE PUBLISHER.)

ILLUSTRATED BY

TWELVE PLATES OF ORNAMENTS, &c.

SELECTED FROM

Ancient Buildings;

CALCULATED TO

EXHIBIT THE VARIOUS STYLES OF DIFFERENT PERIODS.

TO WHICH IS ADDED,

A LIST OF THE CATHEDRALS OF ENGLAND, WITH THEIR DIMENSIONS.

THE THIRD EDITION.

——— Et nos aliquod nomenque decusque
Gessimus— VIRGIL. *Æn. lib. ii.*

LONDON:

PRINTED FOR J. TAYLOR, AT THE ARCHITECTURAL LIBRARY, HIGH HOLBORN.

1808.

Printed by Barlow and Child,
5, Knowles' Court, Little Carter Lane.

ADVERTISEMENT

TO THE

SECOND EDITION.

PUBLIC approbation having rendered a Second Edition of these Essays necessary, the opportunity has been embraced of rendering the volume further interesting and useful, by the addition of two new plates, and the dimensions of all the Cathedrals in England. Of the plates, one is an interior view of Durham cathedral, from a drawing by Mr. Turner; the other, of Westminster Abbey, from a drawing by Mr. Barrow. The points of view here shewn are intended to exhibit the difference of character and effect of the circular and of the pointed styles of ancient English architecture.

Durham cathedral is justly considered one of the best and purest specimens of the early,

circular, or Saxon style. This view, taken from near the west entrance, looking down the nave towards the east, exhibits an interesting specimen of circular arches springing from massive round pillars, decorated with appropriate ornaments, the zig-zag, billet, &c.

The view in Westminster Abbey is taken from near the principal entrance into the choir, looking up the great aisle or nave; and shews the lightness of highly-pointed arches, springing from slender clustered columns, from which issue mouldings and ribs fancifully spreading over the adjoining parts and the vault of the roof. A view is also given of the elegant tracery and magnificence of the great western window.

An attentive inspection and comparison of these prints will give a pretty clear and accurate idea of the two styles, in which consist the distinguishing characters of our ancient architecture.

The measurements of the Cathedrals, it is

presumed, will be particularly acceptable; their real or comparative magnitude is very interesting, and is closely connected with our ideas of the grand and sublime: I know of no book in which the same can be found entire. For ease of consulting, they are arranged alphabetically; and every endeavour has been used to be accurate in the dimensions, which have been taken principally from Willis's Survey of the Cathedrals, and the Mitred Abbies: however, every subsequent authority has been examined, and every possible inquiry amongst an extensive acquaintance has been exercised; so that it is presumed the measurements may be relied upon with considerable certainty, and from which the absolute or comparative magnitude of any of our Cathedrals may easily be known.

The regular Cathedrals only of England are noticed in this list, with the exception of Westminster Abbey, which, for its elegance and magnitude, it would have been unjust to

have omitted: if needful, it may be pleaded it was once numbered among our Cathedrals. The dimensions of old St. Paul's, London, are added, from Dugdale, as highly curious, and without which the subject would not have been complete.

PREFACE.

THE want of a concise historical account of Gothic architecture has been a just cause of complaint: the subject is peculiarly interesting to every Englishman, as his country contains the best specimens of a style of building not unequal in grace, beauty, and ornament, to the most celebrated remains of Greece or Rome. This style of architecture may properly be called English architecture, for if it had not its origin in this country, it certainly arrived at maturity here[a]; under the Saxon dynasty this style of building was introduced,

[a] Since the publication of the first edition of this work, I am highly gratified by a note which has appeared to the account of Durham Cathedral, which accompanies the Plans, &c. of that structure, published by the Antiquarian Society. "It is much to be wished that the word Gothic should not be used in speaking of the architecture of England, from the thirteenth to the sixteenth century. The term tends to give false ideas on the subject, and originates with the Italian writers of the fourteenth and fifteenth centuries; who applied the expression of 'La Maniera Gotica,' in contempt to all the works of art of the middle ages.

"From these writers it was borrowed by Sir Christopher Wren, the first English writer who has applied it to English architecture. There is very little doubt that the light and elegant style of building, whose principal and characteristic

and under the Norman dynasty it received its ultimate degree of beauty and perfection.

To remedy this want of a convenient manual on this interesting subject, it appeared best to collect what had been already said by several authors of celebrity, in detached works, and which had been received as authorities. In this view, the Rev. Mr. *Bentham's* Essay on Saxon and Norman architecture, in his elaborate History of Ely Cathedral, stood foremost for selection, arrangement, and accurate discrimination of historical facts: next to this, Captain *Grose's* Preface on Architecture to his Antiquities of

feature is the high-pointed arch struck from two centres, was invented in this country: it is certain that it was here brought to its highest state of perfection; and the testimonies of other countries, whose national traditions ascribe their most beautiful churches to English artists, adds great weight to this assertion, and peculiar propriety to the term ENGLISH, now proposed to be substituted to the word Gothic.

"The architecture used by the Saxons is very properly called Saxon. The improvements introduced after the Norman Conquest, justify the application of Norman to the edifices of that period. The nation assumed a new character about the time of Henry II. The language, properly called English, was then formed; and an architecture founded on the Norman and Saxon, but extremely different from both, was invented by English artists: it is, surely, equally just and proper to distinguish this style by the honourable appellation of English. This term will therefore be used instead of Gothic, in the course of the work; and it is hoped no English antiquary will be offended at the substitution of an accurate and honourable name, in the place of one which is both contemptuous and inappropriate."

England is to be valued; which, although founded in a great degree on Mr. Bentham's opinions, yet contains some new points and authorities; in particular, his copious notes will be found very interesting, and to contain nearly all that has been said by Sir *Christopher Wren* on the subject, which, being dispersed through many pages of the Parentalia, could not be given as a regular narrative. The concise history by Professor *Warton*, in his notes on Spenser's Fairy Queen, has received too much applause to be neglected; his words, though few, are important on the subject. To these the liberality of the Rev. Mr. *Milner* has allowed me to add, for the gratification of the public, the History of the origin and progress of the pointed arch, lately published by that gentleman, in his learned work on the History and Antiquities of Winchester. He also has been pleased to superintend the selecting of the series of examples on Plates VIII. IX. and X. which tend strongly to corroborate the opinions he maintains.

This gentleman has further been pleased to address to me an important letter, which is given in this volume, in which the inquiring antiquary will find many hints worthy his deliberate attention, respecting an accurate classification of styles, characters, and facts,

whereby to ascertain dates, and on which principle only can be accomplished that great desideratum, the adopting such terms and definitions as shall be applicable to the several characters, and which consequently may become of universal acceptance and usage. The anxious enquirer also is kindly guarded against certain errors which else he may be led into, in perusing the productions of the several celebrated pens now laid before him.

These Essays are arranged according to the priority of their publication, that whoever shall read the whole may receive the arguments in the chronological order wherein they have fallen from the pens of their several writers. They are also printed without any variation from the original texts: and to render this edition completely useful for reference, the pages of Mr. Bentham's quarto volume are retained in this work.

By rendering the laborious researches of these celebrated antiquaries on the ancient architecture of England easy of access, and at a small cost, it is hoped many persons who are anxious for information on this interesting subject, will be led to a higher relish for and obtain more just ideas of a branch of antiquarian study peculiarly interesting to every Englishman, whether considered historically

or nationally; for though many persons eminent in the study of the arts may differ, as taste or fancy inclines them, respecting the inferior or superior grace and beauty of the Gothic or Grecian styles of architecture, yet few, very few, on entering the stupendous fabrics of our pious ancestors, but have felt and acknowledged their superior skill in producing on the human mind those religious and sublime ideas fully correspondent with the holy intent of the structure.

It may be proper to say a word or two respecting the title of this volume, Essays on *Gothic* Architecture. In this instance, the word Gothic is used, being, as I conceive, at present more general and better understood than any other, when applied to our ancient architecture; and as the motive for this selection is general information, it appeared necessary to speak in language generally understood: at the same time it is much to be wished some term or terms more appropriate, and of general use, were adopted, which should convey correct ideas of this peculiar species of architecture. The term Gothic architecture does not occur in any of our ancient historians, it must therefore be of modern introduction; and it has been well

conjectured by several eminent antiquaries was applied solely for the purpose of casting an opprobrious epithet on it, at the period of introducing the Greek or Roman style into this country; and when the ancient religion was to be exploded, so also was the ancient style of its sacred edifices: the more appropriate terms, I conceive, would be, to call that species of it distinguished by the circular arch, *Saxon*, and that distinguished by the pointed arch, *Norman*; for under the guidance of these nations did each principally display its grandeur and peculiarities. Mr. Milner has endeavoured with some skill to ascertain this point. There naturally will be much blending of characters in the period, before one style had completely taken the place of the other.

Having no desire to shine in borrowed plumes, it is necessary to say the subjects of the first six plates are chiefly selected from the delineations by Mr. Wilkins, of Cambridge, as given by the learned Society of Antiquaries, in the 12th volume of their Archæologia; of the accuracy of these representations I have no doubt, and being taken from really ancient examples, they appear better calculated to convey correct ideas of

the several ornaments and parts, characteristic of the different periods and styles, than any inventions possibly could be; besides which they are representations of so many existing specimens of antiquity, often exhibiting much more than the mere part referred to. The print of Bigod's tower is given to show entire a beautiful example of the ancient circular arch, or Saxon style, and that of the tower of York cathedral, to show, in contrast, a beautiful example of the more modern pointed arch, or Norman style.

It may be of use to observe, that whoever wishes to see a large assortment of both Saxon and Norman ornaments will have much pleasure in examining the volume of Archæologia, whence these were taken. Many also of the buildings referred to as authorities in the following Essays may be found delineated in Mr. Carter's publication on the ancient architecture of England; a work of great research and industry, in which the skill and taste of our ancient builders will be handed down to posterity in defiance of the destroying hands of time, or modern innovators. The elegant plates of the Ornaments of York Cathedral, by Mr. Halfpenny, afford a great variety of curious and elegant examples of ornaments in the florid style, accurately displayed, and

selected with taste. Of the same kind is the work of Specimens of Gothic Ornaments, selected from the Church of Lavenham in Suffolk. Mr. Murphy's publication of the Plans, Elevations, &c. of the Monastery of Batalha in Portugal, will afford many accurate and interesting examples, and much important information to the inquiring antiquary [b].

The selection here presented, it is hoped, will be found fully sufficient to illustrate the subject, and give clear ideas of the parts and their peculiarities, as referred to by the several writers. Thus, with an ordinary degree of attention, it is hoped every person may obtain clear notions on this subject, who perhaps would not have bought, or even examined, the costly and bulky works whence this little volume has been extracted; if so, it may be hoped the mite of labour will not have been bestowed in vain.

J. T.

[b] Since this volume was first published, an elegant and important work, on English Antiquities, has been published by Mr. Britton, called "*The Architectural Antiquities of England*," which is well adapted to elucidate the reasoning and observations contained in this volume.

OBSERVATIONS

ON THE MEANS NECESSARY FOR FURTHER ILLUSTRATING

THE

Ecclesiastical Architecture of the Middle Ages,

IN

A LETTER

FROM THE REV. JOHN MILNER, M.A. F.S.A.

TO

MR. TAYLOR.

SIR,

I CONGRATULATE the Public on your attempt to elucidate the architecture of the middle ages, by the collection of Essays which you are about to publish on this subject; and I cannot refrain from pointing out to those antiquaries, who, like myself, delight in this branch of their characteristical science, certain matters, which seem to me particularly deserving of their attention, for promoting its progress, for fixing it on clear and sure principles, and for furnishing artists with rules to go by, when constructing and repairing works in the style in question.

The first requisite for the better illustration of this subject is, that those persons who treat of it should come to a right under-

standing, and agree in the use of the same terms for conveying the same ideas relative to it. In proof of the confusion which still prevails on this subject among men who are most conversant with it, I may refer to these Essays, in one of which the celebrated cathedral of Salisbury is declared to be, not properly a Gothic structure[a], while in two others it is as positively asserted to be entirely Gothic[b]. Again, one of these eminent authors testifies, that "some writers call all our ancient architecture, without any distinction of round or pointed arches, Gothic; though of late," he adds, "the fashion has been to apply the term solely to the latter[c]." The other has much the same observation[d]; and they both agree in condemning the opprobrious term *Gothic*, as applied to that "light, neat, and elegant form of building, with arches pointed, and pillars small and slender[e]," which, in fact, was not invented until about 600 years after

[a] "The style which succeeded to this (the Saxon) was not the absolute *Gothic*, or Gothic simply so called, but a sort of *Gothic Saxon*, in which the pure *Saxon* began to receive some tincture of the *Saracen* fashion.—In this style is Salisbury cathedral." Warton's Essay, p. 4, 5.

[b] "The cathedral of Salisbury consists entirely of that style which is now called (though I think improperly) *Gothic*." Bentham's Essay, p. 73. "The present cathedral of Salisbury is entirely in the Gothic style." Grose's Essay, p. 116.

[c] Bentham's Essay, p. 74, 75.

[d] Grose's Essay, p. 95.

[e] Bentham, p. 73, 74.

the Goths disappeared from the theatre of the world. Finally, they all describe the Saxon and the Norman styles as agreeing in their form and differing only in their dimensions[f]; whereas some ingenious and respectable writers of the present day, by way of exploding the term *Gothic*, make use of the word *Norman*, to signify the pointed style. The confusion that must arise in the minds of uninformed readers from the use of these leading terms, in contradistinguished senses by eminent writers, is easily conceived. My present object, Sir, is merely to suggest the necessity of an agreement amongst the learned in the use of scientific language on the present subject, and not to dictate the conditions of that agreement. I flatter myself, however, that, when speaking of that light and elegant species of architecture which properly began in the reign of our first Plantagenet, and finished in that of our first Tudor, I call it *the pointed style;* and when describing this, in conjunction with the heavy circular order which preceded it, in the time of the Saxons and first Normans, I term them both together, *the architecture of the middle ages*, I say, I flatter myself that I am clearly understood by persons of information, and that the subjects

[f] Warton, p. 4. Bentham, p. 61, 62, 63, 64. Grose, p. 100.

themselves are characteristically denominated.

The next point which, I think, requires to be clearly ascertained amongst architectural antiquaries is, the true origin of the pointed style. I have already exposed in part the absurdity and contradictions into which those persons fall who derive it from the Goths and Vandals of the North, or from the Saracens of the East, or, finally, from the Moors of the West, rather than admit our own ancestors to have been capable of inventing it. I shall farther observe, that whatsoever has been advanced in support of any one of these systems, is the produce of mere conjecture, without a shadow of any kind of historical evidence. For example, we no where read of any architect from Arabia, Morocco, or Spain, arriving in England, France, or Italy, to teach the inhabitants how to construct their churches: nor do we hear of any Englishman, Frenchman, or Italian, that ever travelled into those countries in order to learn architecture. But we find, on the other hand, such an emulation amongst the prelates and princes of the times in question, in our own and the neighbouring countries, but chiefly in our own, to outvie each other in the magnificence and beauty of their buildings; particularly of the ecclesiastical kind; and such

encouragement held out to architects and artists of this country, that it would be extraordinary if these were productive of no new inventions or improvements in the various branches of architecture. In a word, Sir, I think it plain, that even Mr. Warton, who follows Sir Christopher Wren's confused and prejudiced account of this matter[g], confutes his own system whilst he demonstrates, as Bentham and Grose also do, the slow and regular degrees by which this species of architecture rose up and attained to perfection amongst ourselves, instead of being imported in any regular shape from a foreign country. Lastly, Sir, I flatter myself that the essay which you have honoured with insertion in the present collection, taken from my *History*

[g] To show how ill-informed this celebrated architect was in the history of the structures of the middle ages, I may remind the learned reader of his ascribing the buildings of St. Cross and Winchester cathedral to the Saxons "before the Conquest," p. 60; likewise of his denying the said people the use of glass for their windows, ibid.: and ascribing the invention of tracery work to the necessity there was "of disposing the mullions for the better fixing in of glass," which, he says, then, viz. at the end of the thirteenth century, "began to be used in windows," p. 105, 14. See also p. 32. Finally, to prove the confusion of his ideas on this subject, I may mention, that he himself ascribes the invention of the pointed order to the Arabian Mahometans, when they overturned a great part of the Eastern empire, and began to build their mosques and caravanseries, in the seventh and eighth centuries, p. 104; and that he nevertheless cites Mr. Evelyn in support of his system, who asserts, that this same "fantastical light species of building," as he is pleased to call it, "was introduced by the Goths and Vandals of the North, when they subverted the Western empire two centuries earlier!" p. 106.

and Survey of the Antiquities of Winchester, places this fact in a new and still clearer light, while it shews how the successive members and ornaments of this style of architecture grew out of others which preceded them, and that the adoption of the pointed arch was, as it were, the parent germ which produced the whole system.

The most curious and interesting fact, however, in my opinion, for the investigation of architectural antiquaries, is, to ascertain the true principles of *the Sublime and Beautiful*, as applied to those sacred fabrics which are the undoubted masterpieces and glory of the pointed order. It is in vain that Sir Christopher Wren and Mr. Evelyn, who are cited in the notes, page 106, stigmatize these structures, as being "congestions of heavy, dark, melancholy, monkish piles, without any just proportion, use, or beauty." For it is confessedly true, that every man who has an eye to see, and a soul to feel, on entering into York minster and Chapter-house, or into King's college or Windsor chapel, or into the cathedrals of Lincoln or Winchester, is irresistibly struck with mingled impressions of awe and pleasure, which no other buildings are capable of producing; and however he may approve of the Grecian architecture for the purposes of civil and social life, yet he

instinctively experiences in the former a frame of mind that fits him for prayer and contemplation, which all the boasted regularity and magnificence of Sir Christopher's and the nation's pride, I mean St. Paul's cathedral, cannot communicate, at least in the same degree.

To explain in detail the principles on which the above-mentioned effects are produced, would be to describe the whole structure of an ancient cathedral; and, at the same time, to form the best panegyric on the architects who raised them. This, however, it is not my present intention to do, but merely to enumerate a few of these principles which are more obvious. In the first place, then, it is well known that height and length are amongst the primary sources of *the Sublime*[h]: it is equally agreed that these are the proportions which our ancient architects chiefly affected in their religious structures. But besides the real effect of these proportions, which were generally carried as far as they were capable of, the mind was farther impressed by an artificial height and length, which were the natural produce of the style employed. For the aspiring form of the pointed arches, the lofty pediments, and the tapering pinnacles with which our cathedrals are adorned, con-

[h] See Burke's *Treatise on the Sublime and Beautiful.*

tribute perhaps still more to give an idea of height than their real elevation. In like manner, the perspective of uniform columns, ribs, and arches, repeated at equal distances, as they are seen in the aisles of those fabrics, produces an artificial infinite in the mind of the spectator [i], when the same extent of plain surface would perhaps hardly affect it at all [k]. For a similar reason, I think the effect of the ancient cathedrals is greatly helped by the variety of their constituent parts and ornaments, though I suppose them all to be executed in one uniform style. The eye is quickly satiated by any object, however great and magnificent, which it can take in all at once, as the mind is with what it can completely comprehend; but when the former, having wandered through the intricate and interminable length of a pointed vault in an

[i] See Burke's *Treatise on the Sublime and Beautiful.*

[k] This observation on the artificial infinite does not apply to the modern practice of destroying the altar-screen of cathedrals, and taking the Lady chapel into the grand perspective of them. For, first, a vista, by being too long drawn, destroys its proper effect, as Burke proves. Secondly, it is essential that the objects of sight, which are repeated for the above-mentioned purpose, should be uniform in their appearance; otherwise the illusion is destroyed, and intellectual disorder and pain ensues, instead of pleasure. Now this inevitably happens in the case under consideration, where the eye, shooting down the vista, perceivs the great columns and lofty arches of the nave shrink all at once into the slender shafts and low vaulting of the said Lady chapel. See a work on this subject, entitled, *A Dissertation on the modern Style of altering ancient Cathedrals.* Nichols.

ancient cathedral, discovers two parallel aisles of equal length and richness with it; thence proceeding, discovers the transepts, the side chapels, the choir, the sanctuary, and the Lady chapel, all equally interesting for their design and execution, and all of them calculated for different purposes, the eye, I say, in these circumstances, is certainly much more entertained, and the mind more dilated and gratified, than can possibly be effected by any single view, even though our modern architects should succeed in their attempts to make one entire sweep of the contents of a cathedral, in order to shew it all at a single view, and to make one vast empty room of the whole.

It is not necessary for me to dwell upon the effect of that solemn gloom which reigns in these venerable structures, from the studied exclusion of too glaring a light, or upon that glowing effect produced by appropriate painting and carving in the windows, and other parts of them, or upon the essential beauty and just proportions in which they are raised, where the infinite variety of ribs, arches, bosses, and other ornaments, all grow out of the main columns, with the regularity of Nature in the vegetable kingdom, and also with her wise contrivance to combine strength

with beauty; I say, it is not necessary for me to dwell upon these points, because, however they may be carped at by interested men, they are obvious of themselves, and admitted by all persons of candour and sentiment. There is one circumstance, however, to which these venerable structures are indebted for the impression they make, that is not so evident at first sight, and which therefore I here mention, namely, the arrangement and disposition of their several parts, in due subordination to that which is their principal member; by which means that unity of design so necessary in every composition is maintained in them. This principal member in our cathedral churches is the choir and sanctuary, destined for the performance of the service and mysteries of religion: accordingly all the other portions of the sacred fabric will be found subservient, and as it were converging, to this, as to their centre. On the same account, the most exquisite productions of art, and the greatest profusion of wealth, were uniformly bestowed on this particular part. We may judge from hence what must be the effect of destroying the altar-screen of a cathedral, and removing the altar itself, according to a modern instance, under an idea of improving its appearance. It is like removing the head

from the human figure, or placing it on some other member, for the purpose of increasing its beauty.

Lastly, as there are different periods or fashions in pointed architecture, it is worthy the attention of the curious antiquary, to distribute these subjects of his study into their proper classes, and to determine the respective merits of each class or fashion. The late poet laureat has divided the architecture in question into the *absolute* Gothic, the *ornamental* Gothic, and the *florid* Gothic[l]. I do not find fault with this division, but I am by no means satisfied with the application of it. For, not to mention other objections, we have seen that this author excludes by name, the beautiful and highly pointed cathedral of Salisbury from holding a place in any of his classes. Now, so far from there being ground for such an exclusion, I think it admits of a question, whether that species of early pointed architecture in which this cathedral and that of Lincoln, also the abbey churches of Westminster, Beaulieu, Letley[m], and other sacred edifices, were constructed,

[l] Pages 4, 5, 8.

[m] Called anciently *Abbatia de Læto Loco*, now vulgarly and improperly Netley Abbey.

from the first invention of that style down to its enlargement in the reign of Edward I. was, upon the whole, exceeded at any later period. In case, however, we admit the tracery work, which was invented about the latter period, and with which the cathedrals of York and Winchester are adorned, to be a considerable improvement upon the former chaste and simple fashion, yet I cannot by any means agree that the gorgeous or florid style, as Warton calls it, which began in the reign of Henry VI. and continued until the explosion of the pointed order under Henry VIII. was, upon a thorough comparison, more excellent than that kind which had immediately preceded it. I grant, there is a greater profusion of ornament, and generally more exquisite workmanship, for example, in the chapels of King's college, of Windsor, and of Henry VII. than in the two last mentioned cathedrals; the same may be said of Fox's chantry, compared with that of Wykeham; but I maintain that what was gained to our ecclesiastical structures after the middle of the fifteenth century in beauty, was lost in sublimity; which latter quality, I have intimated, forms their proper character. This falling off in sacred architecture is principally to be

attributed to the lowering of the pointed arch, which then began to prevail. The first arches of this order in the reigns of Henry I. Stephen, and Henry II. were exceedingly rude and irregular, sometimes forming the most acute and sometimes the most obtuse angle that can well be conceived; but when the style was further improved under Henry III. and the three Edwards, it was discovered that the most beautiful and perfect kind of pointed arch was that which was formed by segments of a circle, including an equilateral triangle, from the imposts to the crown of the arch; accordingly, this proportion was generally followed down to the aforesaid period; when the architects and artists, being more anxious about their own reputation than the proper effect of the structure, began to lower the arches as much as possible, and in some cases to invert them, in order to bring the fans, pendents, and other curious or surprising ornaments, with which they loaded the vaulting, within the compass of the spectator's distinct sight.

If these hasty remarks upon a subject which, treated as a science, may still be considered as almost new, have the effect of exciting persons who are better qualified than

myself for the undertaking, to do more complete justice to it, I shall at all events think them well bestowed, and shall be enabled to say with more truth than Horace did,

Fungar vice cotis, acutum
Reddere quæ ferrum valet, exsors ipsa secandi.
De Art. Poetica.

I remain, Sir,

Your faithful servant,

JOHN MILNER.

Winchester, Feb. 15, 1800.

ESSAYS

ON

GOTHIC ARCHITECTURE.

REV. THOMAS WARTON'S ESSAY[a].

——— Did arise
On stately pillours framd afer the Doricke guise.

ALTHOUGH the Roman or Grecian architecture did not begin to prevail in England till the time of Inigo Jones, yet our communication with the Italians, and our imitation of their manners, produced some specimens of that style much earlier: perhaps the earliest is Somerset House, in the Strand, built about the year 1549, by the duke of Somerset, uncle to Edward VI. The monument of bishop Gardiner, in Winchester cathedral,

[a] Observations on the Fairy Queen of Spenser, edit. 1762, vol. ii. page 184.

made in the reign of Mary, about 1555, is decorated with Ionic pillars. Spenser's verses, here quoted, bear an allusion to some of these fashionable improvements in building, which, at this time, were growing more and more into esteem. Thus, also, bishop Hall, who wrote about the same time, viz. 1598:

> There findest thou some stately Doricke frame,
> Or neat Ionicke worke. B. v. s. 2.

But these ornaments were often absurdly introduced into the old Gothic style; as in the magnificent portico of the schools at Oxford, erected about the year 1613, where the builder, in a Gothic edifice, has affectedly displayed his universal skill in the modern architecture, by giving us all the five orders together. However, most of the great buildings of queen Elizabeth's reign, have a style peculiar to themselves, both in form and finishing; where, though much of the old Gothic is retained, and great part of the new taste is adopted, yet neither predominates; while both, thus indistinctly blended, compose a fantastic species hardly reducible to any class or name. One of its characteristics is the affectation of large and lofty windows; where, says Bacon, "you shall have sometimes faire houses so full of glass, that one cannot tell

where to become to be out of the sun, &c." *Essayes*, xii.

After what has been here incidentally said on this subject, it may not be amiss to trace it higher, and to give some observations on the beginning and progressive state of architecture in England, down to the reign of Henry VIII.; a period in which, or thereabouts, the true Gothic style is supposed to have expired.

The Normans, at the Conquest, introduced arts and civility. The churches, before this, were of timber, or otherwise of very mean construction. The Conqueror imported a more magnificent, though not a different plan, and erected several stately churches and castles [b]. He built more than thirty monasteries, among which were the noble abbies of Battel and Selby. He granted a charter to Mauritius, bishop of London, for rebuilding St. Paul's church with stone brought out of Normandy. He built the White Tower in the Tower of London. The style then used consisted of round arches, round-headed windows, and round massy pillars, with a sort of regular capital and base, being an adultera-

[b] "Videas ubique in villis ecclesias, in vicis et urbibus monasteria, NOVO EDIFICANDI GENERE exsurgere." Will. Malmesbur. *Rex Willhelmus*, de Gest. Reg. Ang. lib. iii. p. 57. fol. Lond. 1596, ed. Savil.

tion or a rude imitation of the genuine Grecian or Roman manner. This has been named the Saxon style, being the national architecture of our Saxon ancestors before the Conquest: for the Normans only extended its proportions and enlarged its scale. But I suppose at that time it was the common architecture of all Europe. Of this style many specimens remain: the transept of Winchester cathedral, built 1080; the two towers of Exeter cathedral, 1112; Christ Church cathedral, at Oxford, 1180; the nave of Glocester cathedral, 1100; with many others. The most complete monuments of it I can at present recollect are, the church of St. Cross, near Winchester, built by Henry de Blois, 1130; and the abbey church at Rumsey, in Hampshire: especially the latter, built by the same princely benefactor. Another evidence of this style is a circular series of zig-zag sculpture applied as a facing to porticos and other arches. The style which succeeded to this was not the absolute *Gothic*, or Gothic simply so called, but a sort of *Gothic* SAXON, in which the pure *Saxon* began to receive some tincture of the *Saracen* fashion. In this the massy rotund column became split into a cluster of agglomerated pilasters, preserving a base and capital as before; and the short

round-headed window was lengthened into a narrow oblong form, with a pointed top, in every respect much in the shape of a lancet; often decorated in the inside with slender pillars. These windows we frequently find three together, the centre one being higher than the two lights on each side. This style commenced about 1200. Another of its marks is a series of small, low, and close arch-work, sometimes with a pointed head, placed on outside fronts for a finishing, as in the west end of Lincoln and Rochester cathedrals, and in the end of the southern transept of that of Canterbury. In this style, to mention no more, is Salisbury cathedral. Here we find indeed the pointed arch, and the angular though simple vaulting; but still we have not, in such edifices of the improved or SAXON *Gothic*, the ramified window, one distinguishing characteristic of the absolute *Gothic* [c]. It is difficult to define these gradations; but still harder to explain conjectures of this kind in writing, which require ocular demonstration and a coversation on the spot to be clearly proved and illustrated.

The ABSOLUTE *Gothic*, or that which is free from all *Saxon* mixture, began with ramified windows of an enlarged dimension, divided into several lights, and branched out at the

[c] They then seem to have had no idea of a GREAT *eastern* or *western* window.

top into a multiplicity of whimsical shapes and compartments, after the year 1300. The crusades had before dictated the pointed arch, which was here still preserved; but, besides the alteration in the windows, fantastic capitals to the columns, and more ornament in the vaulting and other parts, were introduced. Of this fashion the body of Winchester cathedral, built by that munificent encourager of all public works, William of Wykeham, about the year 1390, will afford the justest idea. But a taste for a more ornamental style had for some time before begun to discover itself. This appears from the choir of St. Mary's church at Warwick, begun [d], at least, before Wykeham's improvements at Winchester, and remarkable for a freedom and elegance unknown before. That certain refinements in architecture began to grow fashionable early in the reign of Edward III. perhaps before, we learn from Chaucer's description of the structure of his *House of Fame*:

> "And eke the hall and everie boure,
> Without peeces or joynings,
> But many subtell compassings
> As habenries and pinnacles,
> Imageries and tabernacles,
> I saw, and full eke of windowes [e]."

[d] Viz. 1341; finished before 1395. Dugdale's Warwickshire, p. 345.

[e] B. iii. fol. 267. col. 2. edit. Speght.

And afterwards,

"I needeth not you more to tellen,
* * * * * * * * *
Of these yates flourishings,
Ne of compaces ne of carvings,
Ne how the hacking in masonries,
As corbetts and imageries[f]."

And in an old poem, called *Pierce the Plowman's Creede*, written perhaps before Chaucer's, where the author is describing an abbey-church:

"Than I munte me forth the MINSTRE for to knowen.
And awayted a woon, wonderly well ybild;
With arches on everich half, and bellyche ycorven
With crochetes on corneres, with knottes of gold.
Wyd windowes ywrought, ywriten full thicke.
* * * * * * * * * * *
Tombes upon tabernacles, tyld opon loft,
Housed in hornes, harde sett abouten
Of armed alabaustre."——

These innovations, at length, were most beautifully displayed in the roof of the divinity school at Oxford, which began to be built 1427. The university, in their letters to Kempe, bishop of London, quoted by Wood[g], speak of this edifice as one of the miracles of the age: they mention particularly, "Ornamenta ad naturalis cœli imaginem variis picturis, subtilique artificio, cælata; valvarum

[f] B. iii. fol. 267, verso. col. 2.
[g] Hist. Antiq. Univ. Oxon. lib. ii. p. 22.

singularissima opera: turricularum apparatum, &c." Yet even here, there is nothing of that minute finishing which afterwards appeared; there is still a massiness, though great intricacy and variety. About the same time the collegiate church of Fotheringay, in Northamptonshire, was designed: and we learn from the orders [h] of Henry VI. delivered to the architect, how much their notions in architecture were improved. The ORNAMENTAL *Gothic* at length received its confirmation about 1441, in the chapel of the same King's college at Cambridge [i]. Here strength united with ornament, or substance with elegance, seems to have ceased. Afterwards, what I would call the FLORID *Gothic* arose, the first considerable appearance of which was in the chapel of St. George, at Windsor, begun by Edward IV. about 1480 [k]; and which, lastly, was completed in the superb chapel of Henry VII. at Westminster.

The FLORID *Gothic* distinguishes itself by an exuberance of decoration, by roofs where the most delicate fretwork is expressed in stone, and by a certain lightness of finishing,

[h] In Dugdale's Monasticon, vol. iii. p. 163.

[i] It was not finished till some years after; but a description and plan of the intended fabric may be seen in the king's will. Stowe's Annals, by Howes, 1614, p. 479, seq.

[k] Ashmole's Order of the Garter, sect. ii. chap. 4. p. 136.

as in the roof of the choir of Glocester[l], where it is thrown like a web of embroidery over the old Saxon vaulting. Many monumental shrines, so well calculated, on account of the smallness of their plan, to admit a multiplicity of delicate ornaments highly finished, afford exquisite specimens of this style. The most remarkable one I can recollect is that of bishop Fox, at Winchester; which, before it was stripped of its images and the painted glass[m] which filled part of its present open-work, must have been a most beautiful spectacle. How quickly tomb-architecture improved in this way may be seen by two sumptuous shrines in the same church, which stand opposite each other; those of bishop Waynflete and cardinal Beaufort. The bishop's is evidently constructed in imitation of the cardinal's; but, being forty years later, is infinitely richer in the variegation of its fretted roof, and the profusion of its ornamented

[l] About the year 1470. The words of the inscription on the inside of the arch by which we enter the choir are remarkable:

Hoc quod DIGESTUM specularis, opusque POLITUM,
Tullii hæc ex onere Seabrooke abbate jubente.

The tower was built at the same time. The lady's chapel soon after, about 1490.

[m] It was broke and destroyed by the Presbyterians 1643, as appears by a passage in Mercurius Rusticus, p. 214. It is not commonly known or observed that this shrine was thus curiously glazed.

spire-work [n]. The screen behind the altar in the same cathedral, built 1525, far superior to that at St. Alban's, is also a striking pattern of this workmanship. We have some episcopal thrones highly executed in this taste. Such is that at Wells, built by bishop Beckington, 1450; and that at Exeter, by bishop Boothe, who succeeded to the see, 1466. The first is of wood, painted and gilded; the latter is likewise of wood, but painted in imitation, and has the effect of stone. They are both very lofty and light. Most of the churches in Somersetshire, which are remarkably elegant, are in the style of the FLORID *Gothic*. The reason is this: Somersetshire, in the civil wars between York and Lancaster, was strongly and entirely attached to the Lancastrian party. In reward for this service, Henry VII. when he came to the crown, rebuilt their churches. The tower of Glocester cathedral, and the towers of the churches at Taunton and Glastonbury, and of a parochial church at Wells, are conspicuous examples of this fashion. Most of the churches of this reign are known, besides other

[n] Waynflete died 1486. How greatly tomb-architecture, within 150 years, continued to alter, appears from an expression in Berthelette's preface to his edition of Gower's Confessio Amantis, 1554: "Gower prepared for his bones a restynge place in the monasterie of St. Marie Overee, where, somewhat after the OLD FASHION, he lieth right sumptuously buried." Gower died 1402.

distinctions, by latticed battlements, and broad open windows. In this style Henry VIII. built the palace of Nonsuch[o]; and Cardinal Woolsey, Hampton Court, Whitehall, Christ-Church in Oxford, and the tomb-house at Windsor.

I cannot more clearly recapitulate or illustrate what has been said, than by observing, that the seals of our English monarchs, from the reign of Henry III. display the taste of architecture which respectively prevailed under several subsequent reigns; and consequently convey, as at one comprehensive view, the series of its successive revolutions; insomuch that if no real models remained, they would be sufficient to show the modes and alterations of building in England[p]. In these each king is represented sitting enshrined amid a sumptuous pile of architecture. Henry III. 1259, appears seated amidst an assemblage of arches of the round Saxon form[q]. So are his successors Edward I. and II. Edward III. 1330, is the first whose seal exhibits pointed Saracen arches; but those of his first seal at

[o] See a cut of its front, perhaps the only representation of it extant, in Speed's Theatre of the Empire of Great Britaine, 1614, fol. p. 11. Map of Surrey. In the same is a cut of Richmond palace, built by Henry VII.

[p] See Speed's History, &c. fol. London, 1627.

[q] See his second seal, Speed, p. 547.

least[r], are extremely simple. In the seals of Richard II. 1378, and his successor, Henry IV. we find Gothic arches of a more complicated construction. At length the seal of Henry V. 1412, is adorned with a still more artificial fabric. And lastly, in the seals of Edward V. Richard III. and Henry VII. we discern a more open, and less pointed Gothic.

I subjoin some general observations. The towers in Saxon cathedrals were not always intended for bells; they were calculated to produce the effect of the louvre, or open lantern, in the inside; and, on this account, were originally continued open almost to the covering. It is generally supposed that the tower of Winchester cathedral, which is remarkably thick and short, was left as the foundation for a projected spire; but this idea never entered into the plan of the architect. Nearly the whole inside of this tower was formerly seen from below; and for that reason, its side arches or windows, of the first story at least, are artificially wrought and ornamented. With this sole effect in view, the builder saw no necessity to carry it higher. An instance of this visibly subsists at present in the inside of the tower of the neighbouring

[r] See his second seal, Speed, p. 584.

Saxon church of St. Cross, built about the same time. The same effect was first designed at Salisbury; where, for the same purpose solely, was a short tower, the end of which is easily discerned by critical observers; being but little higher than the roof of the church, and of less refined workmanship than that additional part on which the present spire is constructed. Many other examples might be pointed out. This gave the idea for the beautiful lanterns at Peterborough and Ely.

Spires were never used till the *Saracen* mode took place. I think we find none before 1200. The spire of old St. Paul's was finished 1221 [s]. That of Salisbury, as appears from a late survey [t], and other proofs, was not included in the plan of the builder, and was raised many years after the church was completed: the spire of Norwich cathedral about 1278 [u]. Sir Christopher Wren informs us, that the architects of this period "thought height the greatest magnificence. Few stones," adds he, "were used but what a man might carry up a ladder on his back, from scaffold to scaffold, though they had pullies and spoked wheels upon occasion; but having rejected cornices, they had

[s] Dugdale's St. Paul's, p. 12.
[t] Survey, &c. by Price.
[u] Willis's Mitr. Abb. vol i. p. 279.

no need of great engines. Stone upon stone was easily piled up to great heights; therefore the pride of their work was in pinnacles and steeples. The *Gothic* way carried all their mouldings perpendicular; so that they had nothing else to do but to spire up all they could." He adds, "they affected steeples, though the *Saracens* themselves used cupolas[w]." But with submission to such an authority, I cannot help being of opinion, that, though the *Saracens* themselves used cupolas, the very notion of a spire was brought from the East, where pyramidical structures were common, and spiral ornaments were the fashionable decorations of their mosques, as may be seen to this day. What the same celebrated artist immediately subjoins, that the use of glass introduced mullions into windows, is very probable; at least it contributed to multiply the ramifications; especially the use of painted glass; where the different stainings were by this means shown to better advantage, and different stories and figures required separate compartments.

Soon after the year 1200, they began in England to cover the façades, or west ends of cathedrals, with niches and rows of statues

[w] Wren's Parentalia, p. 305

large as the life. The first example of this kind is, I think, at Salisbury; for that of Litchfield is too rich to be of equal antiquity [x]. The west end of Wells cathedral was perhaps intended to vie with that of Salisbury, in the same decorations; being in a bordering county, and erected after it, 1402 [y]. It is in fine preservation, and exhibits a curious specimen of the state of statuary at that time. The west front of Exeter, adorned in this taste by bishop Grandison, 1340, is far inferior to any of the other three. That of the abbey church at Bath, is light and elegant, but is much more modern than those I have mentioned, being begun and finished but a few years before the dissolution of the abbey [z].

These hasty remarks are submitted to the candour of the curious, by one, who, besides other defects which render him disqualified for such a disquisition, is but little acquainted with the terms and principles of architecture.

[x] It was built at least before 1400. For the spire of St. Michael's church in Coventry, finished about 1395, is manifestly a copy of the style of its two spires. Salisbury church was begun in 1217, and finished in 1256.

[y] This date is on the authority of Willis, Mitr. Abb. vol. ii. p. 375.

[z] The whole church was rebuilt in the time of the two last priors, after 1500. Leland, Itin. vol. ii. The abbey was dissolved 1534.

REV. JAMES BENTHAM'S

HISTORICAL REMARKS ON THE SAXON CHURCHES.

HAVING, in the preceding chapters[a], taken a summary view of the first reception of the Gospel in Britain, its state and decline, to the utter subversion of it; and also the re-establishment of Christianity in these parts, by the conversion of the Saxons; it may not be improper to say something of the places made use of by the Saxons for their public worship, and to inquire into the ground of a notion that has often prevailed, that their churches were generally timber buildings, or, if of stone, with upright walls only, without any beauty or elegance; and that as to the constructing of arches and vaultings of stone, and supporting them with columns, they understood nothing of it.

This mean opinion of Saxon architecture,

[a] This is the Fifth Section, p. 15, in Mr. Bentham's History of the Cathedral Church of Ely, 1771.

That all references to this Essay may be readily found in this edition, the pages of the original are given in crotchets.

and want of elegance in their churches, though it be countenanced by several passages in Mr. Somner's book of the Antiquities of Canterbury [b]; and his authority for it is frequently cited by modern writers on the subject [c]; without any marks of disapprobation or censure; yet as it appears to me to be without any manner of foundation, I shall beg leave to inquire into the truth of what Mr. Somner has advanced on that subject. His words are these: "Indeed it is observed, that before the Norman advent most of our monasteries and church-buildings were of wood: 'All the monasteries of my realm,' saith king Edgar, in his charter to the abbey of Malmesbury [d], dated in the year of Christ 974, 'to 'the sight are nothing but worm-eaten and 'rotten timber and boards.' And that upon the Norman conquest such timber fabrics grew out of use, and gave place to stone buildings raised upon arches; a form of structure introduced by that nation, furnished with stone from Caen, in Normandy. 'In the 'year 1087 (Stow's words of the cathedral of

[b] P. 8. 86. 93.

[c] Staveley on Churches, p. 103. 146. Ornaments of Churches considered, p. 88. Remarks on Gothic Architecture, by Mr. Warton, in his Observations on Spenser's Fairy Queen, vol. ii. p. 185, 186.

[d] Wilkins Concil. vol. i. p. 260.

'London[e]) this church of St. Paul was burnt 'with fire, and therewith most part of the 'city: Mauritius, then bishop, began, there-'fore, the new foundation of a new church 'of St. Paul; a work that men of that time 'judged would never have been finished, it 'was to them so wonderful for length and 'breadth; [16] as also the same was builded 'upon arches (or vaults) of stone, for defence 'of fire; which was a manner of work before 'that time unknown to the people of this 'nation, and then brought from the French, 'and the stone was fetched from Caen, in 'Normandy.'—'St. Mary Bow church, in 'London, being built much about the same 'time and manner, that is, on arches of stone, 'was therefore called (saith the same author[f]) 'New Mary church, or St. Mary-le-Bow; as 'Stratford bridge, being the first builded with 'arches of stone, was therefore called Stratford-'le-Bow.' This, doubtless, is that new kind of architecture the continuer of Bede (whose words Malmesbury hath taken up) intends, where speaking of the Normans' income, he saith, 'You may observe every where in vil-'lages churches, and in cities and villages, mo-'nasteries erected with a new kind of architec-

[e] Stow's Survey of London, vol. i. p. 638. edit. 1754.
[f] Ibid. p. 542.

'ture[g].'" And again, speaking doubtfully of the age of the eastern part of the choir of Canterbury, he adds, "I dare constantly and confidently deny it to be elder than the Norman conquest; because of the building it upon arches, a form of architecture, though in use with and among the Romans long before, yet after their departure not used here in England till the Normans brought it over with them from France[h]."—Thus far Mr. Somner, whose judgment in matters of antiquity has been, and always will be regarded, and is not without sufficient reason to be called in question; but his opinion concerning Saxon architecture appears so singular, that it will require some consideration before it can be admitted as true; and what that was, is evident from the several passages above cited, viz. that the Saxon churches and monasteries were usually timber fabrics, or if there were any stone buildings among them, they were with upright walls only, without any pillars or arches to support them, and their roofs not arched or vaulted with stone. Indeed if this be admitted as a just account, it may fairly put an end to all further searches after the remains of

[g] "Videas ubique in villis ecclesias, in vicis et urbibus monasteria, novo ædificandi genere consurgere." Will. Malmesb. de Regibus Angl. p. 102. edit. Francof. 1601.

[h] Somner's Antiq. of Canterbury, p. 8.

Saxon architecture in this kingdom; for its necessary consequence will be, that whatever remains of ancient buildings with pillars and arches of stone, are at this time to be met with among us, must have been built either since the Norman conquest, or at least five hundred years earlier, that is, in the time of the Romans; a position that will scarcely be allowed by any one who is acquainted at all with our history in the time of the Saxons.

With regard to their churches being generally of wood, the only authority produced for it is a casual expression in one of king Edgar's charters concerning the ruinous state of the monasteries in his time[i]; meaning no more, as I apprehend, than that the churches and monasteries were in general so much decayed, that the roofs were uncovered, or bare to the timber, and the beams rotted by neglect, and grown over with moss; and not that they were made wholly of wood. It is true indeed some of their fabrics seem to have been totally formed of timber; Bede[k] speaks of an oratory or chapel of that kind in the very place where St. Peter's church [17] in York now stands; it was hastily erected

[i] "—— Quæ velut muscivis scindulis cariosisque tabulis, tigno tenus visibiliter diruta." Carta Regis Edgari, Wilkins Concil. vol. i. p. 260.

[k] Bedæ Hist. Eccl. lib. ii. cap. 14.

on occasion of the conversion of Edwin king of Northumberland, for the purpose of baptizing that king, which was performed by Paulinus, bishop of York[l], on Easter-day, A. D. 627. When the king had resolved to become a Christian on the preaching of Paulinus, he determined to be publicly baptized; and therefore built this church of wood for that purpose. He built it in haste for the present exigency, and as a temporary expedient:—but he likewise informs us, that soon after the king was baptized, he laid the foundation of a stately and magnificent fabric of stone, in which that of wood was included, and might probably be used for divine service, whilst the other was in building[m]. This work was continued six years during that king's life, but before it was finished, he was slain; and it was carried on and finished by Oswald his successor. Other instances of timber fabrics occur in history, and other oratories even of slighter materials[n], erected on particular occasions. A wooden church is

[l] "Baptizatus est autem Eburaci in die sancto Paschæ—in ecclesia Sti. Petri Apostoli, quam ipse de ligno citato opere erexit." Bedæ Hist. Eccl. lib. ii. c. 14.

[m] "Curavit majorem ipso in loco et augustiorem de lapide fabricare basilicam, in cujus medio ipsum quod prius fecerat oratorium includeretur." Ibid.

[n] Simeon Dunelm. lib. ii. cap. 1. 9. Ingulphi Hist. p. 4. 52. edit. Gale. Hist. Ramesiens. inter. XV. Scriptores, per Gale, p. 397. Monast. Angl. vol. i. p. 291. lin. 20.

mentioned by Malmesbury[o], in his life of Aldhelm bishop of Shireburn, in Dultinge, a village in Somersetshire, where Aldhelm died; it belonged to the abbey of Glastonbury, and the monks there rebuilt it of stone. Bede likewise tells us, that Finan, bishop of Lindisfarne, or Holy Island, built there a church for his episcopal see, composed wholly of sawn oak, and covered with reed, according to the fashion of the Scots[p]; and that Eadberct, one of his successors, there took off the reed, and covered the whole, both the roof and sides, with sheets of lead. However, these wooden fabrics, 'tis probable, were not very common, even in those early times of the Saxons; and, as appears by the instances produced, some of them were intended only for temporary use; and the last-mentioned church at Lindisfarne, was built after a manner peculiar to the Scots. This erroneous account of the Saxon churches being generally of wood, or at least without any pillars or arches of stone, Mr. Somner was probably led into, by relying on Mr. Stow, whose authority he vouches and implicitly follows; and then mistaking the sense of that passage in king Edgar's charter, applies it to the entire fabrics, which was indeed appli-

[o] Angl. Sacr. vol. ii. p. 23.
[p] Bedæ Hist. Eccl. lib. iii. cap. 25.

cable only to their roofs: and when he comes to Malmesbury's account of the architecture introduced by the Normans, which is there called *novum genus ædificandi* (the new manner of building), Mr. Sommer takes the novelty of it to consist in its being composed with pillars and arches; and therein differed from the Saxon.

But that the Saxon churches were generally built of stone, and not only so, but that they had pillars and arches, and some of them vaultings of stone, there is sufficient testimony from authentic history, and the undoubted remains of them at this time.

There is a great probability, that at the time the Saxons were converted, the art of constructing arches and vaultings, and supporting stone edifices by columns, [18] was well known among them; they had many instances of such kind of buildings before them, in the churches and other public edifices erected in the times of the Romans. For, notwithstanding the havoc that had been made of the Christian churches by the Picts and Scots, and by the Saxons themselves, some of them were then in being. Bede mentions two in the city of Canterbury [q]; that dedicated to St. Martin on the east side of the city, wherein queen Bertha performed her

[q] Bedæ Hist. Eccl. lib. i. cap. 26 and 33.

devotions, and Augustin and his companions made use of at their first coming; and the other, that which the king, after his conversion, gave to Augustin, and which he repaired and dedicated to our blessed Saviour, and made it his archiepiscopal see. Besides these two ancient Roman churches, it is likely there were others of the same age in different parts of the kingdom, which were then repaired and restored to their former use.

Among other fabrics of these times may be reckoned the many heathen temples used by the idolatrous Saxons: that they were built by the Saxons themselves will probably be allowed; and that some of them were good buildings will hardly admit of any doubt, since for that very reason, pope Gregory advised Augustin[r] that the temples ought not to be demolished, but only the idols that were in them should be removed and destroyed, and then consecrated to the service of the true God. The particular form in which these Saxon temples were built, and wherein they differed from Christian churches in their manner of building, may be difficult to determine with any degree of certainty; but as many of them were afterwards converted to churches[s], I see no reason to think otherwise

[r] Bedæ Hist. Eccl. lib. i. cap. 30.
[s] Monast. Angl. vol. iii. p. 298.

of them, but that they might be similar in their construction, and differ only in the use they were put to.

On king Ethelbert's conversion, A. D. 561, he with great zeal set about building of churches; he laid the foundation of a new one for the monastery of St. Peter and St. Paul [t], which Augustin was then erecting; and designed it for the burying place for himself and his successors kings of Kent, and for the archbishops of Canterbury. He also founded the church of St. Andrew, at Rochester [u], and endowed it for an episcopal see: and by his influence and authority, a new bishopric was erected in the kingdom of the East Saxons, where Sebert his nephew reigned under him; the see of which being fixed at London, he there also founded and endowed the cathedral church of St. Paul [x]. These were the earliest churches erected after the conversion of the Saxons was begun: whether these were built by the Saxons themselves, or whether they procured architects from other countries to build them, is not of any great moment to determine, since we are only considering the general state of architecture in those times. Now, though the account given us by Bede of these three churches founded

[t] Bedæ Hist. Eccl. lib. i. cap. 33.
[u] Ibid. lib. ii. cap. 3. [x] Ibid.

by king Ethelbert is very concise, and nothing is there mentioned in express terms of the particular manner, or of the materials with which they were built; yet some circumstances that he relates afterwards seem plainly to indicate that they were stone buildings, and had both pillars and arches in their composition.

To instance the church of St. Peter and St. Paul: when Augustin died, that church not being finished, he was buried abroad; but as soon as it was consecrated, Bede [19] tells us that his body was brought into the church and decently interred *in porticu illius aquilonari*[y], in the north portico of the same. He further speaks of another portico in the same church, in which queen Bertha, king Ethelbert, and other kings of Kent, were buried; this he calls Porticus Sti. Martini[z], to distinguish it from the former, and was probably the opposite or south portico. The word *porticus* occurs several times in Bede, Alcuin, Heddius, and other ancient Saxon writers, and is generally translated by the English word porch; and so misleads us to think it synonymous with *atrium* or *vestibulum*, denoting a building without-side the church, at the entrance into it: whereas this can by no means be agreeable to Bede's meaning; for in his account of king

[y] Bedæ Hist. Eccl. lib. ii. cap. 3. [z] Ibid. cap. 5.

Ethelbert's interment, he expresses himself in such terms as will not admit of that sense: he was buried, says Bede, *in porticu Sti Martini intra ecclesiam*[a]; which shows that the porticus was within the church: and likewise in relating the burial of archbishop Theodore, A. D. 690, he says he was buried *in ecclesiâ Sti. Petri, in quâ omnium episcoporum Doruvernensium sunt corpora deposita*[b] (in the church of St. Peter, in which all the bodies of the bishops of Canterbury were interred); though he had before said[c] that they were all interred in the north portico except Theodore and Berctwald, whose bodies were buried *in ipsa ecclesia* (in the church itself), because that portico could not conveniently hold any more[d]. To make these several passages

[a] Bedæ Hist. Eccl. lib. ii. cap 5.

[b] Ibid. lib. v. cap. 8.

[c] Ibid. lib. ii. cap. 3.

[d] The better to elucidate the sense of the word *porticus*, the reader will be pleased to compare the following passages from Bede and other ancient writers:—A. D. 721 obiit Johannes Ebor. episcopus in monasterio suo Beverlac. et "sepultus est in porticu S. Petri." Bedæ Hist. Eccl. lib. v. cap. 6.—A. D. 726 obiit Tobias Roffensis episcopus, et "sepultus est in porticu S. Pauli. Apost. quam intro ecclesiam S. Andreæ sibi in locum sepulchri fecerat." Ibid. cap. 23.—A. D. 977 Sidemannus Creditoniæ episcopus "sepulturæ traditur in monasterio Abendonensi in parte ecclesiæ boreali, in porticu S. Pauli." Chron. Saxon.—A. D. 1034 obiit Brithwius Wellensis episcopus; "hic jacet in aquilonari porticu ad S. Johannem (Glastoniæ). Britwoldus Wintoniensis (l. Wiltoniensis) episcopus, obiit A. D. 1045; hic sepultus fuit cum Brithwio in eadem ecclesia in parte aquilonari." Monast. Angl. vol. i. p. 9.—"In ambabus porticibus

in Bede consistent, we must necessarily allow that the royal family of Kent, and the first eight archbishops [20] of Canterbury, were all buried in this church; the former in St. Martin's, or the south portico or aisle; Augustin and his five immediate sussessors in the north portico or aisle; and Theodore and Berctwald in the body of the church: for when he says the two latter were deposited *in ipsa ecclesia* he certainly means no more

Coventriæ jacent ædificatores loci præcellentissimi conjuges." (Scil. comes Leofricus et Godiva comitissa uxor ejus, qui Leofricus obiit A. D. 1057.) Ibid. p. 302. In all the above-cited places, a more considerable part of the church is certainly intended by *porticus* than what is commonly understood by the *church-porch*, as it is usually rendered by our ecclesiastical writers. It was frequently distinguished by the name of some saint; for we read of Porticus Sti. Martini in St. Augustin's church at Canterbury, Porticus Sti. Gregorii in St. Peter's at York, Porticus Sti. Petrii at Beverley, Porticus Sti. Pauli in St. Andrew's at Rochester; and other distinctions of that kind in many of our ancient churches. The reason of which appears to be, that they were dedicated to the honor of those saints. Thus we find by King Edgar's charter to Thorney abbey, that the church there was dedicated, A. D. 972, to St. Mary, St. Peter, and St. Benedict; i. e. the east part of the choir, where the altar was placed, to St. Mary, the western part to St. Peter, and the north porticus to St. Benedict. Ibid. p. 243.—From all these instances where the word *porticus* occurs, it appears that the writers meant by it either what is now commonly called the *side-isle* of the church, or sometimes it may be a particular division of it, consisting of one arch with its recess; as in the following passage in Bede's account of the relics and ornaments with which the church of Hexham was furnished by Acca, who succeeded Wilfred in that bishopric, A. D. 710: " Acquisitis undecunque reliquiis B. apostolorum et martyrum Christi in venerationem illorum altaria *distinctis porticibus* in hoc ipsum intra muros ecclesiæ posuit." Bedæ Hist. lib. v. cap. 20.

by that expression than the nave or body, as distinguished from the side-aisles. It plainly appears then, that this, which was one of the first erected Saxon churches, consisted of a nave and two side-aisles; but how a church of that form could have been supported without pillars and arches of stone, is not easy to conceive; the very terms indeed seem necessarily to imply it. The same remark may be extended and applied to St. Peter's church at York; which was a spacious and magnificent fabric of stone, founded A. D. 627, by king Edwin, soon after he was baptized [e]. For that it had such porticos within, appears from Bede's relation of the death of king Edwin, who was killed in battle, A. D. 633. "His head," says he, "was brought to York, and afterwards carried into the church of the blessed apostle St. Peter, and deposited in St. Gregory's portico [f]."

[e] "Mox ut baptisma consecutus est (Ædwinus) majorem et augustiorem de lapide fabricare curavit basilicam." Bedæ Hist. Eccl. lib. ii. cap. 14.

[f] "Adlatum est caput Ædwini regis Eburacum, et inlatum postea in ecclesiam B. apostoli Petri—positum est in porticu S. Papæ Gregorii." Bedæ Hist. Eccl. lib. ii. cap. 20.—Mr Collier cites this passage from Bede, and seems to have adopted the common error of taking *porticus* for a building without-side the church; and thence falsely infers, that it was not the custom of that age to bury within-side. "King Edwin's head (says he) was deposited in St. Gregory's porch; from whence we may probably conclude, and his children before mentioned, who are said to have been buried in the

Other notices occur in the same author of churches built in or near his own time, some of which are expressly said to have been built of stone, as St. Peter's, in York, last mentioned, and the church at Lincoln, built by Paulinus, after he had converted Blaecca, prefect or governor of that city, which was a stone church of excellent workmanship [g]; and those other churches he speaks of might have been of stone, for aught that appears to the contrary. Bede is indeed rather sparing in his description of them; so that little is to be collected from him of their manner of building; he says nothing, in direct terms, either of pillars or arches in any of his churches, though the word *porticus*, which he frequently uses, may be said to imply both; as it certainly does in some instances, if not in all. He is a little more particular in his account of St. Peter's church, in the monastery of Wermouth, in the neighbourhood of Gyrwi, where he had his education and lived all his days. This was built by the famous Benedict Biscopius [h]: in the year 675, this abbat went over into France, to engage workmen to build his church after

church, were only buried in the porch, the custom of that age going no further." Collier's Ch. Hist. vol. i. p. 86.

[g] "In qua civitate et ecclesiam operis egregii de lapide fecit." Bedæ Hist. lib. ii. cap. 14.

[h] Bedæ Hist. Abbatum Wiremuth. et Gyrw. p. 295.

the Roman manner (as it is there called), and brought them over with him for that purpose. He prosecuted this work with extraordinary zeal and diligence; insomuch that within the compass of a year after the foundations were laid, he caused the roof to be put on, and divine service to be performed in it. Afterwards, when the building was nearly [21] finished, he sent over to France for artificers skilled in the mystery of making glass (an art till that time[i] unknown to the inhabitants of Britain), to glaze the windows both of the porticos and the principal parts of the church; which work they not only executed, but taught the English nation that most useful art.

We have still more certain and explicit accounts of churches built in the northern parts of the kingdom during this century, in which both pillars and arches are expressly men-

[i] What Bede here affirms of abbat Benedict, that he first introduced the art of making glass into this kingdom, is by no means inconsistent with Eddius's account of bishop Wilfrid's glazing the windows of St. Peter's church at York, about the year 669, i. e. seven or eight years before this time. For glass might have been imported from abroad by Wilfrid; but Benedict first brought over the artists, who taught the Saxons the art of making glass.—That the windows in churches were usually glazed in that age abroad, as well as in these parts, we learn from Bede; who, speaking of the church on mount Olivet, about a mile from Jerusalem, says, in the west front of it were eight windows, which on some occasions used to be illuminated with lamps, which shone so bright through the glass, that the mount seemed in a blaze. Bedæ Lib. de Locis sanctis, cap. 6.

tioned. Eddius, who was contemporary with Bede, wrote the life of Wilfrid, bishop of York, and, among other things, informs us of many religious structures, erected by that magnificent prelate; several of which, as appears by his description, were very elegant and sumptuous buildings; besides which, he thoroughly repaired the church of St. Peter, in York [k], which had received great injuries in the wars between Penda, king of Mercia, and the Northumbrians, a few years after it was finished; he put on a new roof, and covered it with lead, and glazed the windows [l], about the year 669.

The churches founded by Wilfrid, and particularly described by Eddius, are the conventual church of Rippon, in Yorkshire, and the cathedral church of Hexham, in Northumberland; of the former he gives this account: He raised on high, and completed the church in Rippon, from the foundations in the ground, to its utmost height, with hewn stone, and supported it with various kinds of pillars and porticos [m].—This elegant church, soon after it was

[k] Eddii Stephani Vita S. Wilfridi, inter XV. Scriptores, cap. xvi. p. 59. edit. Gale.

[l] "Primum culmina corrupta tecti renovans, artificiose plumbo puro tegens, per fenestras introitum avium et imbrium vitro prohibuit, per quod tamen intro lumen radiebat." Ibid.

[m] "In Hrypis basilicam polito lapide a fundamentis in

finished, was with great solemnity consecrated by himself, and dedicated to the honour of St. Peter, in the presence of king Egfrid, and all the abbats and great men of that kingdom. But of all the churches built in that age, that of St. Andrew, in Hexham, deserves our particular notice. Hexham, with the adjoining territory, was part of the crown-land of the kings of Northumberland, and being settled in dower by king Egfrid on his queen, St. Etheldreda, bishop Wilfrid, with the king's consent, obtained a grant of it, in order to raise it to an episcopal see[n]. In the year 674, Wilfrid begun the foundation of this celebrated church, and Eddius speaks with great admiration of it, in this manner: "Its deep foundations, [22] and the many subterraneous rooms there artfully disposed, and above ground the great variety of buildings to be seen, all of hewn stone, and supported by sundry kinds of pillars and many porticos, and set off by the surprising length and height of the walls, surrounded with various mouldings and bands curiously wrought,

terra usque ad summum ædificatam, variis columnis et porticibus suffultam in altum erexit et consummavit." Eddii Vita Wilfridi, ut supra, cap. xvii. p. 59.

[n] Malmesb. de Gestis Pontif. Angl. p. 272.—Rich. Prior Hagulst. de Statu Ecclesiæ, &c. lib. i. cap. 2, 3. 7.—Lib. Elien. MS. fol. ii.

and the turnings and windings of the passages, sometimes ascending or descending by winding stairs to the different parts of the building; all which it is not easy to express or describe by words, &c. neither is there any church of the like sort to be found on this side the Alpes[o]."

Richard, prior of Hexham, who flourished about A. D. 1180, in whose time this famous church was standing, though in a decaying state, more fully describes the manner of its building[p]: "The foundations of this church,"

[o] "Nam in Hagustaldense adepta regione et (l. a) regina Æthildrite Domino dedicata, domum Domino in honorem beati Andræ apostoli fabrefactam fundavit: cujus profunditatem in terra cum domibus mirifice politis lapidibus fundatam, et super terram multiplicem domum, columnis variis et porticibus multis suffultam, mirabilique longitudine et altitudine murorum ornatam, et variis linearum anfractibus, viarum aliquando sursum aliquando deorsum per cochleas circumductam, non est meæ parvitatis hoc sermone explicare quod sanctus ipse præsul animarum, a Spiritu Dei doctus, opere facere excogitavit; neque ullam domum aliam citra Alpes montes talem ædificatam audivimus." Eddii Vita Wilfridi, cap. xxii. p. 62.

[p] "Profunditatem ipsius ecclesiæ criptis et oratoriis subterraneis, et viarum anfractibus, inferius cum magna industria fundavit: parietes autem quadratis et variis et bene politis columpnis suffultos, et tribus tabulatis distinctos immensæ longitudinis et altitudinis erexit: ipsos etiam et capitella columpnarum quibus sustentantur, et arcum sanctuarii historiis et imaginibus et variis celaturarum figuris ex lapide prominentibus et picturarum et colorum grata varietate mirabilique decore decoravit: ipsum quoque corpus ecclesiæ appenticiis et porticibus undique circumcinxit, quæ miro atque inexplicabili artificio per parietes et cocleas inferius et superius distinxit: in ipsis vero cocleis et super ipsas, ascensoria ex lapide et

says he, "St. Wilfrid laid deep in the earth for the crypts and oratories, and the passages leading to them, which were there with great exactness contrived and built under ground: the walls, which were of great length, and raised to an immense height, and divided into three several stories or tiers, he supported by square and various other kinds of well-polished columns. Also, the walls, the capitals of the columns which supported them, and the arch of the sanctuary, he decorated with historical representations, imagery, and various figures in relief, carved in stone, and painted with a most agreeable variety of colours. The body of the church he encompassed about with pentices and porticos, which, both above and below, he divided with great and inexpressible art, by partition walls and winding stairs. Within the staircases, and above them, he caused flights of steps and galleries of stone,

deambulatoria, et varios viarum amfractus modo sursum modo deorsum artificiosissime ita machinari fecit, ut innumera hominum multitudo ibi existere, et ipsum corpus ecclesiæ circumdare possit, cum a nemine tamen infra in ea existentium videri queat: oratoria quoque quam plurima superius et inferius secretissima et pulcherrima in ipsis porticibus cum maxima diligentia et cautela constituit, in quibus altaria in honore B. Dei genitricis semperque virginis Mariæ et S. Michaelis archangeli sanctique Johannis Bapt. et sanctorum apostolorum, martyrum, confessorum, atque virginum, cum eorum apparitibus honestissime præparari fecit: unde etiam usque hodie quædam illorum ut turres et propugnacula supereminent." Richardi Prioris Hagust. lib. i. cap. 3.

and several passages leading from them, both for ascending and descending, to be so artfully disposed, that multitudes of people might be there, and go quite round the church, without being seen by any one below in the nave: moreover, in the several divisions of [23] the porticos or aisles both above and below, he erected many most beautiful and private oratories of exquisite workmanship; and in them he caused to be placed altars in honour of the blessed Virgin Mary, St. Michael, St. John Baptist, and holy apostles, martyrs, confessors, and virgins, with all decent and proper furniture to each of them; some of which remaining at this day, appear like so many turrets and fortified places." He also mentions some other particulars of this church, and concludes with telling us, "It appears from ancient history and chronicles, that of all the nine monasteries over which that venerable bishop presided, and of all others throughout England, this church of St. Andrew in Hexham, was the most elegant and sumptuous, and that its equal was not to be met with on this side the Alpes[q]." The same historian further informs us, that there were in his time at Hexham, two other churches[r]; one not far from the wall of the

[q] Richard. Prior. Hagustal. lib. i. cap. 3.
[r] Ibid. cap. 4.

mother church, of admirable work, built in form of a tower and almost circular, having on the four principal points so many porticos, and was dedicated to the honour of the blessed Virgin Mary; the other, a little further off, dedicated to St. Peter; besides a third on the other side of the river Tine, about a mile distant from the town, dedicated to St. Michael the archangel[s]; and that the general tradition was, that these three churches were founded by bishop Wilfrid, but finished by his successor Acca.

It may be collected from Bede[t], that churches and monasteries were very scarce in Northumberland about the middle of this century; but before the end of it, several very elegant ones were erected in that kingdom, owing chiefly to the noble spirit of Wilfrid, bishop of York. This prelate was then in high favour with Oswi and Egfrid, kings of Northumberland, and most of the nobility of that kingdom; by whose unbounded liberality in lands, and plate and jewels, and all kind of rich furniture, he rose to a degree of opulency as to vie with princes in state and magnificence; and this enabled him to found several rich monasteries, and build such stately edifices in those parts as cannot but excite the

[s] Bedæ Hist. lib. v. cap. 2. line 17.
[t] Ibid. lib. ii. cap. 14. and lib. iii. cap. 2.

admiration of posterity [u]. To prosecute these great undertakings, he gave all due encouragement to the most skilful builders and artificers of every kind, eminent in their several ways, and by proper rewards always kept them in his service, to the great advantage and emolument of his country: some of these he procured at Canterbury, when he had prevailed on Eddius and Eona to undertake the instructing his choirs in the Roman manner of singing [u]: other eminent builders and artists he invited, or brought over with him from Rome, Italy, France, and other countries, for that purpose [w]: and, according to [24] Malmesbury and Eddius, was eminent for his knowledge and skill in the science of architecture, and himself the principal director in all those works, in concert with those excellent masters whom the hopes of preferment

[u] The famous abbat Benedict Biscopius, sometime companion of Wilfrid, in his travels, was about that time engaged in the same noble designs, and founded the monasteries of St. Peter and St. Paul, at Wermouth and Gyrwi.

[u] "Cum cantoribus Ædde et Eona, et cæmentariis, omnisque pene artis ministerio in regionem suam revertens, cum regula Benedicti instituta ecclesiarum Dei bene melioravit." Eddii Vit. S. Wilfridi, cap. xiv. Bedæ Hist. Eccl. lib. iv. cap. 2.

[w] "De Roma quoque, et Italia, et Francia, et de aliis terris ubicumque invenire poterat, cæmentarios, et quoslibet alios industrios artifices secum retinuerat, et ad opera sua facienda secum in Angliam adduxerat." Richard. Prior. Hagulst. lib. i. cap. 5.

had invited from Rome and other places[x] to execute those excellent plans which he had formed. But of all his works the church of Hexham was the first and most sumptuous, and, as far as appears, was never equalled by any other in this kingdom whilst the Saxons continued to govern: indeed, there was no period since the establishment of Christianity among them, in which those polite and elegant arts that embellish life and adorn the country seem to have made so great advances as during the time he continued in favour. Neither was his fame confined to the kingdom of Northumberland; his great abilities and reputation for learning gained him respect in the other kingdoms of the heptarchy: Wulfere and Ethelred, kings of Mercia, often invited him thither to perform the episcopal office among them, and for his advice and instructions in founding several monasteries. He also happily finished the conversion of the heptarchy, by preaching the Gospel to the kingdom of the South Saxons, containing what are now the counties of Surrey and Sussex, the only one which

[x] "Ibi (apud Hagustaldhem) ædificia minaci altitudine murorum erecta, mirabile quantum expolivit, arbitratu quidem multa proprio, sed et cæmentariorum, quos ex Roma spes munificentiæ attraxerat, magisterio, &c." Will. Malmesb. de Gestis Pontif. Angl. p. 272. Eddii Vit. S. Wilfridi, cap. xxii.

remained till that time unconverted; for which end he had been kindly entertained by king Edilwalch, who gave him the peninsula of Selesea[y]; where also he founded a monastery, in which the espiscopal see was at first placed, but afterwards removed to Chichester. And that the church and monastery at Ely, founded by St. Etheldreda, were built under his direction, seems highly probable, as from many other circumstances, so in particular from what is related by the Ely historian[z]; viz. That he spent a considerable time with her on her coming to Ely, in settling the economy of her convent, was entrusted with the whole conducting of her affairs, and (if I rightly understand his meaning) formed the plan of

[y] Bedæ Hist. Eccl. lib. iv. cap. 13. Eddii Vit. S. Wilfridi, cap. xl.

[z] "Solus autem Wilfridus pontifex, quem virgo regina præ omnibus in regno dilectum et electum habuerat, suis tunc necessitatibus provisorem adhibuit, jura illic administravit episcopalia; a quo, sicut in Beda legitur, facta est abbatissa." Lib. Elien. MS. lib. i. cap. 15.

"Post modicum fratris sui memorati regis Aldulfi auxiliis majore inibi (in Ely) constructo monasterio virginum Deo devotarum perplurium, mater virgo et exemplis vitæ cœpit esse et monitis, quarum usibus ex integro insulam constituit." Ibid.

"Sanctus Wilfridus—ut eam in Ely descendisse cognoverat, festinus advolat de animæ commodis, de statu mentis, de qualitate conversationis tractatur. Deinde in abbatissæ officio eam gregemque illic adunatum consecravit, *locum sua dispositione constituit*, seque in omnibus solicitum exhibuit; ubi vitam non solum sibi, sed cunctis ibidem existentibus utilem aliquanto tempore duxit; a quo ipsa plurimum regendi consilium et vitæ solatium habuit." Ibid. cap. xvi.

her monastery; though the necessary funds for carrying on the work, he tells us, were supplied by her brother Aldulfus, king of the East Angles. There are very considerable ruins of this ancient Saxon monastery at Ely still in being, especially of the church that belonged to it;—what kind of fabric that was, we shall be the better able to determine when we come to take a view of those venerable remains, and shall give a more particular description of them [25] in the state they now are. In the mean time I shall proceed in some further observations on the state of architecture among the Saxons, and show not only that the opinion which some authors have entertained of their churches and monasteries, as if they were usually wooden fabrics, is erroneous, and has no foundation in true history; but also that very elegant stone buildings, supported by pillars and arches, were very common with them.

In the beginning of the 8th century, the same style of architecture that was used here in England by the Saxons, was making its way into the more northern parts of this island; for Bede tells us[b], that in the year 710, Naiton, king of the Picts, in a letter he wrote to Ceolfrid, abbat of Gyrwi, informed

[b] Bedæ Hist. Eccl. lib. v. cap. 21.

him, among other things, of his intending to build a church of stone to the honour of St. Peter: requesting, at the same time, to send him some artificers to build it after the *Roman* manner. Hence it should seem that the style of architecture generally used in that age, in England, was called the Roman manner, and was the same that was then used at Rome, in Italy, and in other parts of the empire.

About the same time, A. D. 716, Ethelbald, king of Mercia, founded the monastery of Croyland, in Lincolnshire[c]. The soil was marshy, and not well able to support a fabric of stone: in which circumstances a timber building might be thought most expedient, on account of its lightness, had such been generally used in that age. However, we find the king caused a vast number of large oaken piles to be driven into the ground, and more solid earth to be brought in boats nine miles by water, and laid thereon, to make it the more sound and commodious for building: and then laid the foundation of the church of stone, which he finished, and also all the necessary offices of that monastery, on which he bestowed many ornaments and privileges, and liberally endowed it.

But perhaps one of the most complete Saxon churches that we have any authentic

[c] Ingulphi Hist. Croyland. p. 4.

account of, is that of St. Peter in York, as it was rebuilt about the middle of the 8th century. The church founded there by king Edwin, and finished by his successor, king Oswald, and afterwards repaired by bishop Wilfrid, as mentioned before, having received great damage by a fire which happened in the year 741 [d], archbishop Albert, who was promoted to that see, A. D. 767, thought proper to take it wholly down and rebuild it. This Albert was of a noble family, and a native of York; in his younger days he was sent by his parents to a monastery, where, making a great proficiency in learning, he was ordained a deacon, and afterwards a priest; being taken into the family of archbishop Egbert, to whom he was nearly related in blood, he was by him preferred to the mastership of the celebrated school at York, where he employed himself in educating youth in grammar, rhetoric, and poetry; and taught also astronomy, natural philosophy, and divinity. He afterwards travelled and visited Rome, and the most eminent seats of learning abroad, and was solicited by several foreign princes to stay, but declined it; and returning home, he brought [26] with him a fine collection of books he had met with in

[d] Chron. Mailros. Simeon Dunelm. and Hoveden ad annum 741. Tanner's Notit. Monast. p. 627.

his travels, and soon after was made archbishop of York. Finding his church in a ruinous condition, occasioned probably by the late fire, and perhaps not sufficiently repaired since that accident, he determined to take it wholly down, and to rebuild it. The principal architects he employed in that work were two of his own church, and who had received their education under him, namely, Eanbald, (who afterwards succeeded him in the see of York) and the famous Alcuin; both of them reckoned among the most learned men of that age; who, with great zeal and unanimity, begun, carried on, and finished it in a few years; and, as appears by the description, executed the work in a most sumptuous and magnificent manner. Albert just lived to see his church completed: for growing old and infirm, he either resigned his see, or took Eanbald, his intended successor, for his coadjutor in the episcopal office, for the three or four last years of his life; and they both assisted at the consecration of it, only ten days before his death, which happened, according to Alcuin, November the 8th, 780. His noble collection of books he deposited in the library at York, probably the same which is said to have been founded by archbishop Egbert[c];

[c] Willielm. Malmesburiens. de Pontificibus Angl. lib. iii. f. 153.

but which he greatly augmented by the addition of all those he had procured in his travels abroad; and committed them to the custody of the learned Alcuin, who gratefully celebrates the memory of his patron, and ranks him in the highest class amongst men of eminence, in that age, for learning, piety, and munificence; and has at the same time left us a description of this church, which I shall give below in his own words[f].

From the description here given, in which the principal members and requisites of a complete and finished edifice are expressed, pillars, arches, vaulted roofs, windows, porticos, galleries, and variety of altars, with their

[f] "Ast nova basilicæ miræ structura diebus
Præsulis hujus erat jam cœpta, peracta, sacrata.
Hæc nimis alta domus solidis suffulta columnis,
Supposita quæ stant curvatis arcubus, intus
Emicat egregiis laquearibus atque fenestris,
Pulchraque porticibus fulget circumdata multis,
Plurima diversis retinens solaria tectis,
Quæ triginta tenet variis ornatibus aras.
Hoc duo discipuli templum, doctore jubente,
Ædificarunt Eanbaldus et Alcuinus, ambo
Concordes operi devota mente studentes.
Hoc tamen ipse pater socio cum præsule templum
Ante die decima quam clauderet ultima vitæ
Lumina præsentis, Sophiæ sacraverat almæ."

This account of archbishop Albert, and his rebuilding St. Peter's church in York, is extracted from Alcuin's poem, *De Pontificibus et Sanctis Ecclesiæ Ebor.* published by Dr. Gale, A. D. 1691, in which his life is more fully wrote. The name of Albert is barely mentioned by bishop Godwin, in his catalogue of Bishops; though his great learning, piety, and munificence, well deserve to have his name transmitted to latest posterity.

proper ornaments and decorations, the reader will, in some measure, be able to form a judgment of the whole, and be apt to conclude that architecture was carried in that age to some considerable degree of perfection.

Mr. Walpole, in his Anecdotes of Painting in England, and incidental notes on other Arts, observes[g], "that as all the other arts were formerly confined to cloisters, so also was architecture too; and that when we read that such a bishop or such an abbat built such and such an edifice, they often gave the plans as well as furnished the necessary funds." The justness of this observation appears in this instance of rebuilding [27] St. Peter's in York, of which Eanbald and Alcuin were the chief architects; in that of the church belonging to Gyrwi monastery, built by abbat Benedict Biscopius; and those of the churches of Rippon, Hexham, and Ely, by bishop Wilfrid; and in many other instances that occur in history, some of which may be taken notice of afterwards. And indeed it is highly probable that the principal architects of many or most of our best churches and monasteries, both in this and succeeding ages, were some or other of those religious societies themselves, who, generally speaking, wanted only inferior

[g] Vol. i. p. 110.

artists and workmen to carry their designs into execution; and even of these they were in part supplied out of their own houses, where the elegant and polite arts, particularly those of sculpture and painting, were much cultivated and improved.

In the 9th century, the frequent and almost continual invasions of this kingdom by the Danes, introduced the greatest disorder and confusion in the state, and brought it almost to the brink of ruin. War, and its necessary attendants, the desolation and destruction of our churches, monasteries, and other edifices, both public and private, with the slaughter of the inhabitants, take up the greatest part of the annals of those times. Meanwhile arts and sciences, which in the last century had been in a very flourishing condition, began to be neglected; and religion and learning lost their proper influence on men's minds, and were sinking apace into disrepute and contempt [h]. In the midst of these public calamities, however, it pleased Providence to raise to the throne Alfred, worthily surnamed the Great [i]. The vigorous measures he pursued to rescue his country from the hands of those barbarous invaders of it, and to restore it to

[h] Asser. de Rebus Gestis Alfredi, p. 27.
[i] Floren. Wigorn. A. D. 871.

its former lustre, deserve the highest encomiums. Engaged as he was in continual wars, during his whole reign of near thirty years, he never ceased to exert his utmost endeavours to restore religion and learning, to promote commerce, to cultivate and improve all the fine and elegant arts [k]. His court was the resort of learned men of all professions, as well his own subjects as foreigners, invited thither from the neighbouring kingdoms, and retained there by proper rewards [l]. Among his other accomplishments he was skilful in architecture, and excelled his predecessors in elegance of building and adorning his palaces [m]; in constructing large ships for the security of his coasts [n], and erecting castles in convenient parts of the kingdom. Indeed architecture before this time had been almost wholly confined to religious structures; but now was, by Alfred and his two immediate successors, chiefly applied to military purposes, in erecting fortresses and towers, and in building and repairing walled towns, become necessary to curb the insolence and perfidy of the Danes; and thus by adding to the defence and security, he also greatly im-

[k] Matth. Westm. ad an. 888.
[l] Ingulphi Hist. p. 27. edit. Gale.
[m] Flor. Wigorn. ad an. 871 & 887.
[n] Matth. Westm. ad an. 897.

proved the face of the country[o]. He also encouraged the repairing of churches, founded two monasteries, and restored some others[p]: and to all these great works he allotted, and constantly expended, a considerable part of his revenue[q]. But the mischiefs the kingdom had sustained were immense, and the evils too heavy to be soon removed, and indeed required more than one age to do it; for it is certain that neither the exalted genius nor the active zeal even of the great Alfred himself, were [28] ever able effectually to remove them. Part of this work, however, was carried on by his successor in the next age.

Edward, his son, who succeeded him in the year 900, though inferior to his father in learning, surpassed him in martial glory[r]. His genius too was turned to architecture, but it was chiefly military: he built fortresses in different parts of the kingdom, encompassed cities and great towns with walls and other means of defence, to check the sudden incursions of the Danes; out of whose hands he wrested the kingdoms of the East Angles and Northumberland, and obliged the Scots and

[o] Ingulphi Hist. p. 27.
[p] Flor. Wigorn. ad an. 887.
[q] Ibid.—Matth. Westm. ad an. 888.
[r] Matth. Westm. et Flor. Wigorn. ad an. 901. Ingulphi Hist. p. 28.

Welsh to own his sovereignty [s]. He is said to have repaired the university of Cambridge [t], after it had been burnt by the Danes; though whether is meant of restoring it as a seat of learning, or only rebuilding the town, is not clear. Some churches and monasteries, indeed, were founded or repaired in his reign, in that of Athelstan [u], and his immediate successors; but the more general restoration of them was reserved for the peaceable times of king Edgar.

Edgar is said to have founded more than forty monasteries [w]; but they were chiefly such as had been destroyed by the Danes, and were either in possession of the secular clergy, or had lain desolate to that time; and so may more properly be said to have been repaired only, and restored to their former use:—however, several monasteries were first founded in his time; and by the accounts we have of them, it appears that some new improvements in architecture had lately been made, or were about that time introduced. The famous

[s] Matth. Westm. ad an. 907. Flor. Wigorn. ad an. 921.

[t] Rudborne, Angl. Sacr. vol. i. p. 209.

[u] Ingulphi Hist. p. 29.—Matth. Westm. ad an. 939.—Malmesb. de Pontif. lib. v. p. 362. edit. Gale, inter xv. Scriptores.

[w] Matth. Westm. et Flor. Wigorn. ad an. 957.—"Non fuit in Anglia monasterium sive ecclesia cujus non emendaret cultum vel ædificia." Monast. Angl. vol. i. p. 33.

abbey of Ramsey, in Huntingdonshire[w], was one of these; and was founded by Ailwin, alderman of all England, as he is styled, with the assistance of Oswald, bishop of Worcester, afterwards archbishop of York. All the offices and the church belonging to this monastery were new built under the direction of Ednoth, one of the monks of Worcester, sent thither for that purpose. This church, which was six years in building, was finished in the year 974, and in the same year, on the 8th of November, with great solemnity, dedicated by Oswald, then raised to the archiepiscopal see of York, assisted by Alfnoth, bishop of the diocese, in the presence of Ailwin and other great men. By a description given of this church, in the history of that abbey[x], it appears to have had "two towers raised above the roof, one of them at the west end of the church, affording a noble prospect at a distance to them that approached the island; the other, which was larger, was supported by four pillars in the middle of the building,

[w] Hist. Ramesiensis, cap. xx. p. 399. inter xv. Scriptores, edit. per Gale.

[x] "Duæ quoque turres ipsis tectorum culminibus eminebant, quarum minor versus occidentem in fronte basilicæ pulchrum intrantibus insulam a longe spectaculum præbebat; major vero in quadrifidæ structuræ medio columnas quatuor, porrectis de alia ad aliam arcubus sibi invicem connexas, ne laxè defluerent, deprimebat." Ibid.

where it divided in four parts, being connected together by arches, which extended to other adjoining arches, to keep them from giving way." From this passage one may easily collect, that the plan of this new church was a cross, with side-aisles, and was adorned with two [29] towers, one in the west front, and the other in the intersection of the cross; a mode of building, I apprehend, which had not then been long in use here in England; for it is obvious to remark, that in the descriptions we have remaining of the more ancient Saxon churches, as particularly those of St. Andrew's, at Hexham, and St. Peter's, at York [y], fully enough described; not a word occurs, by which it can be inferred that these, or indeed any other of them, had either cross buildings or high towers raised above the roofs; but, as far as we can judge, were mostly square [z], or rather oblong buildings, and generally turned circular at the east end [a]; in form nearly, if not exactly, resembling the *basilicæ*, or courts of justice in great cities throughout

[y] See p. 34. 45.

[z] St. Peter's at York, begun by king Edwin A. D. 627, is particularly reported by Bede to have been of that form; "per quadrum cœpit ædificare basilicam." Bedæ Hist. Eccl. lib. ii. cap. 14.

[a] An ancient church at Abbendon, built about the year 675, by Heane the first abbat of that place, was an oblong building, 120 feet in length; and, what is singular, was of a circular form on the west as well as on the east.—"Habebat in longitudine 120 pedes, et erat rotundum tàm in parte occidentali quàm in parte orientali." Monast. Angl. vol. i. p. 98.

the Roman empire; many of which were in fact converted into Christian churches[b], on the first establishment of Christianity under Constantine the Great; and new-erected churches were constructed on the same plan, on account of its manifest utility for the reception of large assemblies. Hence *basilica* was commonly used in that and several succeeding ages for *ecclesia* or church, and continued so even after the form of our churches was changed. Now these *basilicæ* differed in their manner of construction from the *templa;* for the pillars of these latter were on the outside of the building, and consequently their porticos exposed to the weather; but the pillars of the former were within, and their porticos open only towards the nave or main body of the building; their chief entrance also was on one end, the other usually terminating in a semi-circle: and this, I conceive, was the general form of our oldest Saxon churches. The plan of the old conventual church at Ely, founded in the year 673, conveys a good idea of it; except that the original circular end having been occasionally taken down, as I find, in the year 1102, and another building, ending also in a semi-circle, erected in its room. The original form is traced out by dotted lines at *a*, Pl. 5.

[b] Camden's Britannia, col. 780. edit. Gibson.

It is highly probable that the use of bells gave occasion to the first and most considerable alteration that was made in the general plan of our churches, by the necessity it induced of having strong and high-raised edifices for their reception. The æra indeed of the invention of bells is somewhat obscure [c]; and it must be owned that some traces of them may be discovered in our monasteries even in the seventh century [d]; yet I believe one may venture to assert, that such large ones as required distinct buildings for their support, do not appear to have been in use among us till the tenth century; about the middle of which we find several of our churches were furnished with them, by the munificence of our kings [e]. And the account we have of St. Dunstan's gifts to Malmesbury abbey, by their historian, plainly shows they were [30] not very common in that age; for he says [f], the liberality of that prelate consisted chiefly

[c] Vid. Spelmanni Gloss. ad Campana.

[d] Bedæ Hist. lib. iv. cap. 23.

[e] "Ethelstanus rex (circa A. D. 935) dedit quatuor magnas campanas Sto. Cuthberto." Monast. Angl. vol. i. p. 40. lin. 52.—"Rex Eadredus duo signa non modica ecclesiæ Eboracensi donavit." Matth. Westm. ad an. 946.—"Rex Edgarus, circa A. D. 974. ecclesiæ Ramesiensi dedit—duas campanas, 20 librarum pretio comparatas." Hist. Ramesien. cap. xxii. edit. Gale.

[f] S. Dunstanus—"in multis loco munificus, quæ tunc in Anglia magni miraculi essent, decusque et ingenium confe-

in such things as were then wonderful and strange in England; among which he reckons the large bells and organs he gave them. But from this period they became more frequent, and in time the common furniture to our churches.

Bells, no doubt, at first suggested the necessity of towers: towers promised to the imagination something noble and extraordinary, in the uncommon effects they were capable of producing by their requisite loftiness and variety of forms. The hint was improved, and towers were built not only for necessary use [g], but often for symmetry and ornament, in different parts of the fabric; and particularly when the plan of a cross was adopted, the usefulness of such a building appeared in the intersection of the cross, adding strength to the whole, by its incumbent weight on that

rentis offerre crebro. Inter quæ signa sono et mole præstantia; et organa," &c. Will. Malmesb. de Pontif. lib. v. edit. Angl. Sacr. vol. ii. p. 33.—" Dunstanus, cujus industria refloruit ecclesia (Glaston.)—fecit organa et signa duo præcipua, et campanam in refectorio." Will. Malmesb. de Antiq. Glaston. Eccles. p. 324. edit. Galei.—" Athelwoldus abbas monasterii de Abendon, regnante Edgaro rege, fecit duas campanas, quas in domo (Dei) posuit, cum aliis duabus, quas B. Dunstanus fecisse perhibetur." Mon. Angl. vol. i. p. 104. lin. 42.

[g] The campanile, or that particular tower allotted for the use of bells, was sometimes a distinct separate building of itself; but more commonly adjoined to the church, so as to make part of the fabric, usually at the west end.—Vid. Monast. Angl. vol. i. p. 995. lin. 42.

part[h]. This is the short history of the origin of towers and steeples; which always have been, and still are, considered as the pride and ornament of our churches. Possibly these innovations might begin under king Alfred: the encomiums bestowed on him as an architect[i] look that way, and seem to point at some notable improvements in that art in his time; perhaps from models imported from abroad by some of the learned foreigners he usually entertained in his court. However, there is room enough for panegyric on that head[k], without ascribing to him "the re-edifying and restoring almost every monastery in his dominions, which either the prevailing poverty of the times, or the sacrilegious fury of the Danes, had brought to ruin; his building many and improving more[l]:" all which may with great truth and propriety be applied to king Edgar: it is sufficient to say, there were two monasteries undoubtedly of Alfred's foundation, Athelney and Shaftesbury. Of the former some account is given by Malmesbury[m]; it was situate on a small

[h] See this explained by Sir Christopher Wren, in his Letter to Bishop Sprat, in Widmore's Hist. of Westminster Abbey, p. 53.

[i] "In arte architectonica summus." Malmesb. de Reg. Angl.

[k] Flor. Wigorn. ad an. 887.

[l] Biographia Britan. under Ælfred.

[m] Monast. Angl. vol. i. p. 202.

river-island in Somersetshire, containing only two acres of firm ground, surrounded with an extensive morass, which rendered it difficult of access: king Alfred founded it there in pursuance of a religious vow, as it had once afforded him a safe retreat in time of his great distress: "The church, on account of its confined situation, was not large, but constructed in a new mode of building; for four piers firmly fixed on the ground supported the whole structure, having four chancels of a circular form in its circumference[n]." This [31] church was probably one of his first essays in architecture; a model rather than a finished piece, a specimen of that new form then introduced, in which one may discover the rudiments of a cross and of a tower, which we find were afterwards brought to greater perfection, and were the fashionable improvements in the next age; as appears by Ailwin's church at Ramsay above mentioned[o].

Had there been more remains of these ancient structures now in being, or had our ecclesiastical writers been more express, we

[n] "Fecit ecclesiam situ quidem pro angustia spacii modicam, sed novo ædificandi modo compactam; quatuor enim postes solo infixi totam suspendunt machinam, quatuor cancellis opere spherico in circuitu ductis." Ibid.—It is not quite clear, from this description, whether it was of stone or timber. The word *postes*, used for the pillars or supporters, does not, I think, determine either way.

[o] Page 51, 52.

might at this time have been able to speak with greater certainty concerning them: but monuments of that kind are very rare[p], and what descriptions we have are mostly expressed in such general terms as give little or no satisfaction in the particulars we want to know. Sir Christopher Wren, speaking of the old abbey church of Westminster, built by king Edgar, gives his opinion of what kind of architecture the Saxons used[q]: "This, 'tis probable, was a good strong building, after the manner of the age, not much altered from the Roman way. We have some forms of this ancient Saxon way, which was with piers,

[p] The Saxon way of building was, as Sir Christopher Wren observes, very strong. There were many cathedral and conventual churches of that kind at the time of the Conquest, which might therefore probably have continued to this day, had they not been pulled down, or suffered to run to ruin by neglect: one principal cause of which was the removal of the bishops' sees (some of which had been placed in villages or small towns) to cities and more populous places, by the council of London, A. D. 1078. This occasioned the old Saxon cathedrals in the deserted sees to be neglected and fall to decay; and in those places where they were suffered to continue, they were soon after demolished, to make room for the more stately fabrics of the Normans; except in some few instances, where perhaps some parts of the old Saxon fabrics may be found incorporated with the then new works of the Normans. The ruin of the rest is easily accounted for, considering what havoc was made of them at their surrender, and the effectual means used by the visitors appointed by king Henry VIII. to destroy them. See Willis's Hist. of Abbies, vol. i. p. 180, 181, and vol. ii. Pref. p. 7.

[q] Letter to the Bishop of Rochester, in Wren's Parentalia, and in Widmore's Hist. of Westm. Abbey, p. 44.

or round pillars (stronger than Tuscan or Doric), round-headed arches, and windows. Such was Winchester cathedral of old, and such at this day are the royal chapel in the White Tower of London, the chapel of St. Cross's, the chapel of Christ Church in Oxford, formerly an old monastery, and divers others I need not name, built before the Conquest; and such was St. Paul's, built in king Rufus's time. These ancient structures were without buttresses, only with thicker walls; the windows were very narrow and lattised [r]; for king Alfred is praised for inventing lanterns to keep in the lamps in the churches." This eminent architect, I doubt, could not easily recollect such specimens of buildings, as he was really satisfied were built before the Conquest, which his discourse naturally led him to inquire after; for the instances he brings were undoubtedly erected after that period; by this, however, he discovers his own opinion, that the Saxon and Norman architecture was the same.

[r] (The windows narrow and lattised.) If the meaning be, that the windows before Alfred's time were not glazed—it is apprehended this is a mistake. See p. 32, note i.

IMPROVEMENTS IN ARCHITECTURE BY THE NORMANS.

Our historians [32] expressly mention a new mode of architecture brought into use by the Normans, and particularly apply it to the abbey church at Westminster, built by king Edward the Confessor, *circa* A. D. 1050, in which he was buried [s]; and afterwards speak of it as the prevailing mode throughout the kingdom [t]. This account has not a little perplexed our modern critical inquirers, who are at a loss to ascertain the real difference between the Saxon and Norman mode of building.

In order, therefore, to reconcile these seemingly different accounts, it is proper to observe, that the general plan and disposition of all the principal parts in the latter Saxon and earliest Norman churches was the same: the chief entrance was at the west end into the nave; at the upper end of that was a cross, with the arms of it extending north and south,

[s] "Sepultus est (rex Edwardus) Londini in ecclesia, quam ipse novo compositionis genere construxerat; a qua pòst multi ecclesias construentes, exemplum adepti, opus illud expensis æmulabantur sumptuosis." Matth. Paris Hist. p. 1. "Ecclesiam ædificationis genere novo fecit." W. Malmesb. de Gest. Reg.

[t] "Videas ubique in villis ecclesias, in vicis et urbibus monasteria, novo ædificandi genere consurgere." Malmesb. ibid. p. 102.

and the head (in which was the choir) towards the east, ending usually in a semi-circular form: and in the centre of the cross was a tower; another was frequently added (and sometimes two, for the sake of ornament or symmetry), to contain the bells; the nave, and often the whole building, was encompassed with inner porticos; the pillars were round, square, or angular, and very strong and massive; the arches and heads of the doors and windows were all of them circular. In these respects it may perhaps be difficult to point out any considerable difference between the Saxon and Norman architecture. In a popular sense, however, I apprehend there will appear a sufficient distinction to entitle the latter a new mode of building, as our historians call it, in respect to the former.

The Saxons, some time before the ruin of their state, as Malmesbury observes[u], had greatly fallen from the virtue of their ancestors in religion and learning; vice and irreligion had gained the ascendant, and their moral character was at the lowest ebb; in their way of living they were luxurious and expensive, though their houses were at the same time rather low and mean buildings[u]. The Nor-

[u] De Regibus Angliæ, p. 101.

[u] "Parvis et abjectis domibus totos sumptus absumebant: Francis et Normannis absimilies, qui amplis et superbis ædificiis modicas expensas agunt.—Normanni erant tunc et sunt

mans, on the contrary, were moderate and abstemious, and delicate withal in their diet; fond of stately and sumptuous houses; affected pomp and magnificence in their mien and dress, and likewise in their buildings, public as well as private. They again introduced civility and the liberal arts, restored learning, and endeavoured to raise again religion from the languid state into which it was fallen: to this end they repaired and enlarged the churches and monasteries, and erected new ones every where, in a more stately and sumptuous manner than had been known in these kingdoms before. This is what our historians take notice of, and call it a new manner of building; we style it now the Norman architecture; the criterion of which is, I conceive, chiefly its massiveness and enlarged dimensions, in which it far exceeded the Saxon. Some specimens of this Norman kind of building had indeed been produced a little time before the Conquest, owing to our communication with the Normans, whose customs and manners king Edward, who had been

adhuc vestibus ad invidiam culti, cibis citra ullam nimietatem delicati. Domi ingentia ædificia (ut dixi) moderatos sumptus moliri, paribus invidere superiores prætergredi velle, &c. Religionis normam in Anglia usque quaque emortuam adventu suo suscitarunt; videas ubique in villis ecclesias, in vicis et urbibus monasteria novo ædificandi genere consurgere, recenti ritu patriam florere, ita ut sibi perisse diem quique opulentus existimet, quem non aliqua præclara magnificentia illustret." Ibid. p. 102.

educated in that court was fond of introducing [w];—such was the abbey church which he erected at Westminster, and "served afterwards as a pattern to other builders, being rivalled by many, at a great expense [x];" such also was St. Peter's church in Gloucester, built about the same time, part of which is still remaining: this mode of building, in the language of professed artists, we find, is reckoned the same with the Saxon: all the difference, as far as appears to us at this distance of time, was in the magnitude or size of their several buildings. The Saxon churches were often elegant fabrics, and well constructed, as has been observed before; but generally of a moderate size, frequently begun and finished in five or six years, or less time. The works of the Normans were large, sumptuous, and magnificent; of great length and breadth, and carried up to a proportionable height, with two and sometimes three ranges of pillars one over another, of different dimensions, connected together by various

[w] "Rex Edwardus natus in Anglia, sed nutritus in Normannia, et diutissime immoratus, pene in Gallicum transierat, adducens ac attrahens de Normannia plurimos, quos variis dignitatibus promotos in immensum exaltabat—cœpit ergo tota terra sub rege, et sub aliis Normannis introductis Anglicos ritus dimittere et Francorum mores in multis imitari." Ingulphi Hist. p. 62. edit. Gale.

[x] "A qua pòst multi ecclesias construentes, exemplum adepti, opus illud expensis æmulabantur sumptuosis." Matth. Paris Hist. p. 1.

arches [y] (all of them circular); forming thereby a lower and upper portico, and over them a gallery; and on the outside three tiers of windows: in the centre was a lofty strong tower, and sometimes one or two more added at the west end, the front of which generally extended beyond the side-aisles of the nave or body of the church.

The observation made on rebuilding St. Paul's in king William Rufus's time, after the fire of London in 1086, by Mauritius, bishop of that see, viz. "That the plan was so extensive, and the design so great, that most people who lived at that time censured it as a rash undertaking, and judged that it never would be accomplished [z];" is in some measure applicable to most of the churches begun by the Normans.—Their plan was indeed great and noble, and they laid out their whole design at first; scarcely, we may imagine, with a view of ever living to see it completed in

[y] "Diversis fultum columnis, ac multiplicibus volutum hinc et inde arcubus:" as Sulcardus, a monk of Westminster, describes the abbey church there, built by Edward the Confessor; which was of this kind. Widmore's Hist. of Westminster Abbey, p. 10.

[z] "Nova fecit (Mauritius) fundamenta tam spaciosa, ut qui ea tempestate vixerunt plerique cœptum hoc ejus tanquam temerarium et audax nimium reprehenderent, nunquam futurum dicentes, ut molis tam ingentis structura aliquando perficeretur." Godwin de Præsul. Angl. p. 175.

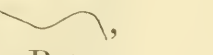
their lifetime: their way therefore was usually to begin at the east end, or the choir part; when that was finished, and covered in, the church was often consecrated; and the [34] remainder carried on as far as they were able, and then left to their successors to be completed: and it is very observable, that all our cathedral, and most of the abbey churches, besides innumerable parochial churches, were either wholly rebuilt or greatly improved within less than a century after the Conquest, and all of them by Normans introduced into this kingdom; as will evidently appear on examining the history of their several foundations[a]. It was the policy of the first Norman kings to remove the English or Saxons from all places of trust or profit, and admit none but foreigners: insomuch that Malmesbury, who lived in the reign of Henry I. observes, "That in his time there was not one Englishman possessed of any post of honour or profit under the government, or of any considerable

[a] Particular accounts may be found in Dugdale's Monasticon, Godwin de Præsulibus Angliæ, Willis's History of Abbies, &c. Thus Lanfranc, promoted to the see of Canterbury 1070, begun the foundation of a new church there. Thomas I. archbishop of York 1070—Walcher bishop of Durham 1071—Walkeline of Winchester 1070—Remigius of Lincoln 1076—all of them foreigners, did the like in their several sees; and so of the rest.

office in the church[b]." The bishoprics and all the best ecclesiastical preferments were filled by those foreigners, and the estates of the Saxon nobility were divided among them. Thus being enriched and furnished with the means, it must be owned, they spared neither pains nor cost in erecting churches, monasteries, castles, and other edifices both for public and private use, in the most stately and sumptuous manner. And I think we may venture to say, that the circular arch, round-headed doors and windows, massive pillars, with a kind of regular base and capital, and thick walls, without any very prominent buttresses, were universally used by them to the end of king Henry the First's reign, A. D. 1134; and are the chief characteristics of their style of building: and among other peculiarities that distinguish it, we may observe, that the capitals of their pillars were generally left plain, without any manner of sculpture; though instances occur of foliage and animals on them; as those on the east side of the south transept at Ely. The body or trunk of their vast massive pillars were usually plain cylinders, or set off only with small half-

[b] "Anglia facta est exterorum habitatio, et alienigenarum dominatio; nullus hodie Anglus dux, vel pontifex, vel abbas; advenæ quique divitias et viscera corrodunt Angliæ; nec spes ulla est finiendæ miseriæ." Malmesb. de Reg. Angl. p. 93.

columns united with them; but sometimes to adorn them they used the *spiral groove* winding round them, and the *net* or *lozenge work* overspreading them; both of which appear at Durham, and the first in the undercroft at Canterbury. As to their arches, though they were for the most part plain and simple, yet some of their principal ones, as those over the chief entrance at the west end, and others most exposed to view, were abundantly charged with sculpture of a particular kind; as the *cheveron work* or *zig-zag moulding*, the most common of any; and various other kinds rising and falling, jetting out and receding inward alternately, in a waving or undulating manner;—the *embattled frette*, a kind of ornament formed by a single round moulding, traversing the face of the arch, making its returns and crossings always at right angles, so forming the intermediate spaces into squares alternately open above and below; specimens of this kind of ornament appear on the great arches in the middle of the west front at Lincoln, and within the ruinous part of the building adjoining to the great western tower at Ely;—the *triangular frette*, where the same kind of moulding at every [35] return forms the side of an equilateral triangle, and consequently encloses the intermediate spaces in that figure;—the *nail-head*, resembling the

heads of great nails driven in at regular distances, as in the nave of old St. Paul's, and the great tower at Hereford (all of them found also in more ancient Saxon buildings);—the *billetted moulding*, as if a cylinder should be cut into small pieces of equal length, and these stuck on alternately round the face of the arches; as in the choir of Peterborough, at St. Cross, and round the windows of the upper tire on the outside of the nave at Ely: this latter ornament was often used (as were also some of the others) as a *fascia*, *band*, or *fillet*, round the outside of their buildings. Then to adorn the inside walls below, they had rows of little pillars and arches; and applied them also to decorate large vacant spaces in the walls without: and the *corbel table*, consisting of a series of small arches without pillars, but with heads of men and animals, serving instead of corbels or brackets to support them, which they placed below the parapet, projecting over the upper, and sometimes the middle tire of windows;—the *hatched moulding*, used both on the faces of the arches, or for a *fascia* on the outside; as if cut with the point of an ax at regular distances, and so left rough; and the *nebule*, a projection terminating by an undulating line  , as under the upper range of windows at Peterborough. To these marks that distinguish

the Saxon or Norman style, we may add that they had no *tabernacles* (or *niches* with canopies), or pinnacles, or spires; or indeed any statues to adorn their buildings on the outside, which are the principal grace of what is now called the Gothic; unless those small figures we sometimes meet with over their door-ways, such as is that little figure of bishop Herebert Losing over the north transept door at Norwich, seemingly of that time; or another small figure of our Saviour over one of the south doors at Ely, &c. may be called so: but these are rather mezzo-relievos than statues; and it is known that they used reliefs sometimes with profusion; as in the Saxon or Norman gateway at Bury, and the two south doors at Ely. Escutcheons of arms are hardly, if ever, seen in these fabrics, though frequent enough in after times: neither was there any tracery in their vaultings. These few particularities in the Saxon and Norman style of building, however minute they may be in appearance, yet will be found to have their use, as they contribute to ascertain the age of an edifice at first sight[c].

[c] Some curious observations on the difference between the Norman style of building used in the Conqueror's reign and that in use under Henry II. may be met with in the account given by Gervase, a monk of Canterbury, of the fire that happened there A. D. 1174, and burnt the choir, and of the repairing of the same. X. Scriptores, col. 1302. lin. 43, 44, &c.

It cannot be expected we should be able to enumerate all the decorations they made use of, for they designed variety in the choice of them; but a judicious antiquarian who has made the prevailing modes of architecture in distant times his study, will be able to form very probable conjectures concerning the age of most of these ancient structures; the alterations that have been made in them since their first erection will often discover themselves to his eye. Perhaps the most usual change he will find in them is in the form of the windows; for in many of our oldest churches, I mean such as were built within the first age after the Conquest, the windows, which were originally round-headed, have since been altered for others [36] of a more modern date, with pointed arches. Instances of this kind are numerous, and may often be discovered, by examining the courses of the stone-work about them; unless the outward face of the building was new-cased at the time of their insertion, as it sometimes happened: without attending to this, we shall be at a loss to account for that mixture of round and pointed arches we often meet with in the same building.

There is perhaps hardly any one of our cathedral churches of this early Norman style (I mean with round arches and large pillars)

remaining entire, though they were all originally so built; but specimens of it may still be seen in most of them. The greatest part of the cathedrals of Durham, Carlisle, Chester, Peterborough, Norwich, Rochester, Chichester, Oxford, Worcester, Wells, and Hereford; the tower and transept of Winchester, the nave of Glocester, the nave and transept of Ely, the two towers of Exeter, some remains in the middle of the west front of Lincoln, with the lower parts of the two towers there; in Canterbury, great part of the choir, formerly called Conrade's choir (more ornamented than usual), the two towers called St. Gregory's and St. Anselm's, and the north-west tower of the same church; the collegiate church of Southwell, and part of St. Bartholomew's in Smithfield, are all of that style; and so was the nave and transept of old St. Paul's [d], London, before the fire in 1666; York and Lichfield have had all their parts so entirely rebuilt at separate times, since the disuse of round arches, that little or nothing of the old Norman work appears in them at this day. The present cathedral church of Salisbury is the only one that never had any mixture of this early Norman style in its composition: the old cathedral, begun soon after

[d] A view of the inside by Hollar is preserved in Dugdale's Hist. of St. Paul's.

the Conquest, and finished by Roger, that great and powerful bishop of Salisbury under Henry I. was at old Sarum, and of the same kind; it stood in the north-west part of the city, and the foundations are still visible: if one may form a judgment of the whole by the ruins that remain, it does not appear indeed to have been so large as some other of those above mentioned; but it had a nave and two porticos or side-aisles, and the east end of it was semi-circular; its situation, on a barren chalky hill, exposed to the violence of the winds, and subject to great scarcity of water, and that within the precincts of the castle (whereby frequent disputes and quarrels arose between the members of the church and officers of the castle), gave occasion to the bishop and clergy in the reign of Henry III. to desert it, and remove to a more convenient situation about a mile distant towards the south-east, where Richard Poore [e], at that time bishop, begun the foundation of the present church on the fourth of the calends of May, 1220. It consists entirely of that style which is now called (though I think improperly) *Gothic;* a light, neat, and elegant form of building; in which all the arches are (not round but) pointed, the pillars small and

[e] Price's Observations on the Cathedral Church of Salisbury, p. 8. Camden's Britan. col. 107. note *y*.

slender, and the outward walls commonly supported with buttresses.

The term Gothic, applied to architecture, was much used by our ancestors in the last century, when they were endeavouring to recover the ancient Grecian or Roman manner (I call it indifferently by either of those names, for the Romans borrowed it from the Greeks): whether they had then a retrospect to those particular times when the Goths ruled in the empire, or only used it as a term of reproach, to stigmatize the productions [37] of ignorant and barbarous times, is not certain; but I think they meant it of Roman architecture; not such, certainly, as had been in the age of Augustus (which they were labouring to restore), but such as prevailed in more degenerate times, when the art itself was almost lost, and particularly after the invasions of the Goths; in which state it continued many ages after without much alteration. Of this kind was our Saxon and earliest Norman manner of building, with circular arches and strong massive pillars, but really Roman architecture, and so was called by our Saxon ancestors themselves[f]. Some writers call all our ancient architecture, without distinction of round and pointed arches, Gothic: though

[f] Bedæ Hist. Eccl. lib. v. cap. 21. and Hist. Abb. Wiremuth. et Gyrw. p. 295. line 4.

I find of late the fashion is to apply the term solely to the latter; the reason for which is not very apparent. The word Gothic no doubt implies a relation some way or other to the Goths; and if so, then the old Roman way of building with round arches above described seems to have the clearest title to that appellation; not that I imagine the Goths invented, or brought it with them; but that it had its rise in the Gothic age, or about the time the Goths invaded Italy. The style of building with pointed arches is modern, and seems not to have been known in the world till the Goths ceased to make a figure in it. Sir Christopher Wren thought this should rather be called the Saracen way of building: the first appearance of it here was indeed in the time of the crusades; and that might induce him to think the archetype was brought hither by some who had been engaged in those expeditions, when they returned from the Holy Land. But the observations of several learned travellers[g] who have accurately surveyed the ancient mode of building in those parts of the world, do by no means favour that opinion, or discover the least traces of it. Indeed I have not yet met with any satisfactory account of the origin of pointed arches,

[g] Pococke, Norden, Shaw.

when invented, or where first taken notice of: some have imagined they might possibly have taken their rise from those arcades we see in the early Norman or Saxon buildings on walls, where the wide semi-circular arches cross and intersect each other, and form thereby, at their intersection, exactly a narrow and sharp-pointed arch. In the wall south of the choir at St. Cross is a facing of such wide round interlaced arches by way of ornament to a flat vacant space; only so much of it as lies between the legs of the two neighbouring arches, where they cross each other, is pierced through the fabric, and forms a little range of sharp-pointed windows: it is of king Stephen's time; whether they were originally pierced I cannot learn. But whatever gave occasion to the invention, there are sufficient proofs they were used here in the reign of Henry II. The west end of the old Temple church, built in that reign, and dedicated by Heraclius patriarch of the church of the Holy Resurrection in Jerusalem, (as appears by the inscription[h] lately over the door) is now remaining; and has, I think, pointed and round arches originally inserted; they are intermixed; the great arches are pointed, the windows above are round; the west door is a

[h] Stow's Survey of London, p. 746. edit. 1754.

round arch richly ornamented; and before it a portico or porch of three arches, supported by two pillars; that opposite to the church-door is round, the other two pointed, but these have been rebuilt. The great western tower of Ely cathedral, built in the same reign by Geoffry Rydel bishop there, [38] who died A. D. 1189, consists of pointed arches. At York, under the choir, remains much of the old work, built by archbishop Roger in Henry the Second's reign; the arches are but just pointed, and rise on short round pillars, whose capitals are adorned with animals and foliage: many other instances of the same age might be recollected; and possibly some may occur of an earlier date; for this, like most novelties, we may suppose was introduced by degrees.

In Henry the Third's reign the circular arch and massive column seem wholly to have been laid aside, and the pointed arch and slender pillar being substituted in their room, obtained such general approbation throughout the kingdom, that several parts of those strong and stately buildings that had been erected in the preceding age were taken down, and their dimensions enlarged, in order to make room for this new mode of building. The cathedral church of Salisbury is wholly of this kind of architecture; it was begun early in

that reign [i], and finished in the year 1258. This church (says a competent judge [k] of such matters) "may be justly accounted one of the best patterns of architecture in the age wherein it was built." To which we may add, that it has this advantage of all others, that the whole plan was laid out at once, and regularly pursued throughout the whole course of its building in the same style to its finishing; whence arise that uniformity, symmetry, and regular proportion observable in all the parts of it, not to be found in any other of our cathedral churches; which having been all originally built with circular arches and heavy pillars, and most of them afterwards renewed, in part or in whole, at different times, and under all the changes and variety of modes that have prevailed since the first introduction of pointed arches, now want that regularity and sameness of style so necessary to constitute an entire and perfect building. In the same reign were considerable additions made to several of our cathedral and other churches, especially at their east end; some of which, as they are still remaining, may serve to illustrate the particular style then in use: such is that elegant structure at the east end of Ely cathe-

[i] Godwin de Præsul. Angliæ, p. 345.
[k] Sir Chr. Wren, in Parentalia, p. 304.

dral [l], built by Hugh Norwold, bishop of Ely [m], who, in the year 1234, took down the circular east end of the church, and laid the foundation of his new building, now called the Presbytery, which he finished in 1250. King Henry also [n], in the year 1245, ordered the east end, tower, and transept of the abbey church at Westminster, built by Edward the Confessor, to be taken down, in order to rebuild them at his own expense in a more elegant form: he did not live, it seems, to complete his whole design; but the difference of style in that part of the church from the other, westward of the cross, which was also rebuilt afterwards, indicates how far the work was carried on in that king's time, or soon after. "The new work of St. Paul's, so called, at the east end, above the choir, was begun in the year 1251. Also the new work of St. Paul's, to wit, the cross-aisles, were begun to be new built in the year 1256 [o]." Besides these, we find there were a great many considerable alterations and additions made to [39] several other cathedral and

[l] The whole of the building called the Presbytery consists of nine arches; only the six easternmost, with that end, were built by Bishop Norwold; the other three adjoining to the dome were afterwards rebuilt by bishop Hotham, in the reigns of Edward II. and Edward III.

[m] MS. Bibl. Cotton. Tiberius, B. 2. fol. 246.

[n] Matth. Paris Hist. p. 581. 861.

[o] Stow's Survey of Lond. vol. i. p. 659.

conventual churches and new buildings carrying on about the same time in different parts of the kingdom; some of which are particularly taken notice of by our historians [p].

During the whole reign of Henry III. the fashionable pillars to our churches were of Purbec marble, very slender and round, encompassed with marble shafts a little detached, so as to make them appear of a proportionable thickness: these shafts had each of them a capital richly adorned with foliage, which together in a cluster formed one elegant capital for the whole pillar. This form, though graceful to the eye, was attended with an inconvenience, perhaps not apprehended at first; for the shafts designed chiefly for ornament, consisting of long pieces cut out horizontally from the quarry, when placed in a perpendicular situation were apt to split and break; which probably occasioned this manner to be laid aside in the next century. There was also some variety in the form of the vaultings in the same reign; these they generally chose to make of chalk, for its lightness; but the arches and principal ribs were of free-

[p] Monast. Angl. vol. i. p. 273. line 44. p. 386. line 40. p. 752. line 11. et vol. iii. p. 270. Godwin de Præsul. Angl. p. 371, 372. 461. 503. 505. 678. 742.

stone. The vaulting of Salisbury cathedral, one of the earliest, is high pitched, between arches and cross-springers only, without any further decorations; but some that were built soon after are more ornamental, rising from their imposts with more springers, and spreading themselves to the middle of the vaulting, are enriched at their intersection with carved orbs, foliage, and other devices—as in bishop Norwold's work above mentioned [q].

As to the windows of that age, we find they were long, narrow, sharp-pointed, and usually decorated on the inside and outside with small marble shafts: the order and disposition of the windows varied in some measure according to the stories of which the building consisted: in one of three stories, the uppermost had commonly three windows within the compass of every arch, the centre one being higher than those on each side; the middle tire or story had two within the same space; and the lowest only one window, usually divided by a pillar or mullion, and often ornamented on the top with a trefoil, single rose, or some such simple decoration; which probably gave the hint for branching out the whole head into a variety of tracery and foliage, when the windows came afterwards to be enlarged. The use of painted

[q] Page 79.

and stained glass in our churches is thought to have begun about this time [r]. This kind of ornament, as it diminished the light, induced the necessity of making an alteration in the windows, either by increasing the number or enlarging their proportions; for though a gloominess rather than over-much light seems more proper for such sacred edifices, and "better calculated for recollecting the thoughts, and fixing pious affections," as the elegant writer last cited observes [s]; yet without that alteration, our churches had been too dark and gloomy; as some of them now, being divested of that ornament, for the same reason appear over-light.

As for spires and pinnacles, with which our oldest churches are sometimes, and more modern ones are frequently decorated, I think they are not very ancient. The towers and turrets of churches built by the Normans, in the first century after [40] their coming, were covered, as platforms, with battlements or plain parapet walls; some of them indeed built within that period we now see finished with pinnacles or spires; which were additions since the modern style of pointed arches prevailed; for before we meet with none. One of the earliest spires we have any account of

[r] Ornaments of Churches considered, p. 94.
[s] Ibid.

is that of old St. Paul's [t], finished in the year 1222; it was, I think, of timber, covered with lead; but not long after, they begun to build them of stone, and to finish all their buttresses in the same manner.

Architecture under Edward I. was so nearly the same as in his father Henry the Third's time, that it is no easy matter to distinguish it. Improvements no doubt were then made, but it is difficult to define them accurately. The transition from one style to another is usually effected by degrees, and therefore not very remarkable at first, but it becomes so at some distance of time: towards the latter part indeed of his reign, and in that of Edward II. we begin to discover a manifest change of the mode as well in the vaulting and make of the columns as the formation of the windows. The vaulting was, I think, more decorated than before; for now the principal ribs arising from their impost, being spread over the inner face of the arch, run into a kind of tracery; or rather with transforms divided the roof into various angular compartments, and were usually ornamented in the angles with gilded orbs, carved heads or figures, and other embossed work. The columns retained something of their general form already described,

[t] Stow's Survey of London, p. 639. edit. 1754.

that is, as an assemblage of small pillars or shafts; but these decorations were now not detached or separate from the body of the column, but made part of it, and being closely united and wrought up together, formed one entire, firm, slender, and elegant column. The windows were now greatly enlarged, and divided into several lights by stone mullions running into various ramifications above, and dividing the head into numerous compartments of different forms, as leaves, open flowers, and other fanciful shapes; and more particularly the great eastern and western windows (which became fashionable about this time) took up nearly the whole breadth of the nave, and were carried up almost as high as the vaulting; and being set off with painted and stained glass of most lively colours, with portraits of kings, saints, martyrs, and confessors, and other historical representations, made a most splendid and glorious appearance.

The three first arches of the presbytery adjoining to the dome and lantern of the cathedral church of Ely, begun the latter part of Edward the Second's reign, A. D. 1322, exhibit elegant specimens of these fashionable pillars, vaulting, and windows. St. Mary's chapel (now Trinity parish church) at Ely, built about the same time, is constructed on

a different plan; but the vaulting and windows are in the same style. The plan of this chapel, generally accounted one of the most perfect structures of that age, is an oblong square; it has no pillars nor side-aisles, but is supported by strong spiring buttresses, and was decorated on the outside with statues over the east and west windows; and within-side also with statues, and a great variety of other sculpture well executed [u].

[41] The same style and manner of building prevailed all the reign of Edward III. and with regard to the principal parts and members, continued in use to the reign of Henry VII. and the greater part of Henry VIII.; only towards the latter part of that period the windows were less pointed and more open; a better taste for statuary began to appear; and indeed a greater care seems to have been bestowed on all the ornamental parts, to give them a lighter and higher finishing; particularly the ribs of the vaulting, which had been large, and seemingly formed for strength and support, became at length divided into such an abundance of parts issuing from their imposts as from a centre, and spreading them-

[u] The fashion of adorning the west end of our churches with rows of statues in tabernacles or niches, with canopies over them, obtained very soon after the introduction of pointed arches; as may be seen at Peterborough and Salisbury; and in later times we find them in a more improved taste, as at Lichfield and Wells.

selves over the vaulting, where they were intermixed with such delicate sculpture as gave the whole vault the appearance of embroidery, enriched with clusters of pendent ornaments, resembling the works Nature sometimes forms in caves and grottos, hanging down from their roofs. The most striking instance of this kind is, without exception, the vaulting of that sumptuous chapel of king Henry VII. at Westminster.

To what height of perfection modern architecture (I mean that with pointed arches, its chief characteristic) was carried on in this kingdom appears by that one complete specimen of it, the chapel founded by king Henry VI. in his college at Cambridge, and finished by King Henry VIII[u]. The decorations, harmony, and proportions of the several parts

[u] It is formed on the same plan as St. Mary's chapel at Ely, and indeed the design is said to have been thence taken. King Henry VI. laid the foundations of the whole about the year 1441, which were raised five or six feet above ground in the west end, but much higher towards the east; for that end was covered in many years before the west end was finished. How far the work proceeded in the founder's time cannot be said with certainty: the troubles he met with in the latter part of his reign hindered the prosecution of it. Richard III. a few months before he was slain, had signed a warrant for 300*l.* out of the temporalities of the bishopric of Exeter, then in his hands, towards carrying on the building (MS. Harleian, No. 433. fol. 209. b.); but I believe nothing more was done by him. Henry VII. undertook the work, and carried up the remainder of the battlements, and completed the timber roof: after his death, king Henry VIII. finished the whole fabric, as well the towers and finials as the vaulted roof within, and fitted up the choir in the manner we now see it.—

of this magnificent fabric, its fine painted windows, and richly ornamented spreading roof, its gloom, and perspective, all concur in affecting the imagination with pleasure and delight, at the same time that they inspire awe and devotion. It is undoubtedly one of the most complete, elegant, and magnificent structures in the kingdom. And if, besides these larger works, we take into our view those specimens of exquisite workmanship we meet with in the smaller kinds of oratories, chapels [w], and monumental edifices, produced so late as the reign of Henry VIII. some of which are still in being, or at least so much of them as to give us an idea of their former grace and beauty; one can hardly help concluding, that architecture arrived at its highest point of glory in this kingdom but just before its final period.

[42] At that time no country was better furnished and adorned with religious edifices,

One contract for building the stone vault, and three of the towers, and twenty-one fynyalls (the upper finishing of the buttresses), dated the 4th of Henry VIII. A. D. 1512; and another for vaulting the two porches and sixteen chapels about the building, dated the following year, are still in the archives of the college.

[w] Bishop West's chapel at the east end of the south aisle of Ely cathedral, built in the reign of Henry VIII. affords an elegant specimen of the most delicate sculpture, and such variety of tracery, beautiful colouring, and gilding, as will not easily be met with in any work produced before that reign.

in all the variety of modes that had prevailed for many centuries past, than our own. The cathedral churches in particular were all majestic and stately structures. Next to them the monasteries, which had been erected in all parts of the kingdom, might justly claim the pre-eminence; they were, for the generality of them, fine buildings; and the churches and chapels belonging to some of them equalled the cathedrals in grandeur and magnificence, and many others were admired for their richness and elegance; and, whilst they stood, were without doubt the chief ornament to the several counties in which they were placed.

The state of these religious houses, on occasion of the reformation in religion then carrying on, became the object of public deliberation; but however necessary and expedient the total suppression of them might be judged at that time, yet certainly the means that were made use of to suppress them were not altogether the most justifiable, and the manner of disposing of them and their great revenues has been found in some respects detrimental to the true interests of religion. For had the churches belonging to them been spared, and made parochial in those places where they were much wanted, and had the lands and impropriated tithes, which the several religious

orders had unjustly taken from the secular clergy, and kept possession of by papal authority, been reserved out of the general sale of their revenues, and restored to their proper use, the maintenance of the clergy, to whom of right they belonged, we at this time should have had less cause to regret the general ruin of all those religious houses that ensued, and the present scanty provision that remains to the clergy in some of the largest cures in the kingdom.

The havoc and destruction of those sumptuous edifices that soon followed their surrender, gave a most fatal turn to the spirit of building and adorning of churches; architecture in general was thereby discouraged, and that mode of it in particular which was then in a very flourishing state, and had continued so for more than three centuries, sunk under the weight, and was buried in the ruins of those numerous structures which fell at that time.

Unhappily, the orders and injunctions given to the several commissioners under king Henry VIII. and in the following reign during the minority of Edward VI. and likewise in queen Elizabeth's time, for removing and taking away all shrines and superstitious relics, and seizing all superfluous jewels and plate, were

often misapplied, carried to excess, and executed in such a manner as to have, at least in some instances, the appearance of sacrilegious avarice rather than of true zeal for the glory of God and the advancement of religion.

Be that as it may, certain it is that at this time, when most of the churches belonging to the religious orders were utterly ruined and destroyed, our cathedral and parochial churches and chapels suffered greatly; for they were divested and spoiled, not only of their images and superstitious relics, but of their necessary and most unexceptionable ornaments; and afterwards, by the outrages and violence committed on them in the last century, during the unhappy times of confusion in the great rebellion, they were reduced to a still more deplorable state and condition, and left [43] naked and destitute of all manner of just elegance, and of every mark and character of external decency.

It must be owned, that in several intermediate periods a zeal for the honour of God and his holy religion has not been wanting to heal these wounds, to repair and fitly re-adorn these sacred structures; but it has not been attended with the success that all wise and good men must wish for and desire. Many of our parochial churches still carry the marks

of violence committed in those days; others through inattention and neglect (besides the defects they are unavoidably subject to by age) are become ruinous and hasting to utter decay, unless timely supported: insomuch that very few of them, excepting those in large and populous cities and towns, the number of which is small in comparison of the rest, can justly be considered as in a proper state of repair, decent and becoming structures consecrated to the public service of God. The chapels indeed belonging to the several colleges in the two universities (very few need to be excepted) claim our particular notice for the care and expense we find bestowed on them, the decent order in which they are kept, and the justness and elegance of their ornaments. And our cathedral churches, those monuments of the pious zeal and magnificence of our forefathers, we doubt not will soon appear again in a state becoming their dignity. The care and attention that is paid them by the present set of governors in their respective churches [x]

[x] To instance the particular cathedral churches that have been repaired and beautified within the last thirty or forty years, and the several designs formed to bring them to a still more perfect state, would carry me beyond my present purpose. It may be sufficient only to intimate what has been done of late at York, Lincoln, Peterborough, Ely, Norwich, Chichester, Salisbury, &c. But as that particular scheme for

deserves the highest encomiums; and if we can make a proper and just estimate of what may reasonably be expected will be done, from what has already been done of late, and is still doing, for the furtherance of that desirable work, there is the fairest prospect, and the most ample ground of confidence, that the present age will stand distinguished by posterity for repairing and adorning those venerable structures, and transmitting them with advantage to the most distant times.

I cannot conclude these cursory remarks more properly than in the words of the elegant author of *Ornaments of Churches considered*[y]: "After the establishment of Christianity, the

raising a sufficient fund for these purposes, happily fixed on by the members of the church of Lincoln, provides for the future as well as the present exigencies of the church, does honour to those who were the promoters of it, and may probably in time to come be adopted by most other cathedral and collegiate bodies; I cannot here with any propriety omit taking notice, that about fifteen or sixteen years since, the Rt. Rev. Dr. John Thomas, then bishop of Lincoln (now of Salisbury), taking into consideration the ruinous state of that cathedral, and the small fund allotted for the repairs, held a general chapter, wherein it was unanimously agreed, that, for the time to come, *ten per cent.* of all fines, as well of the bishop as dean, dean and chapter, and all the prebendaries, should be deposited with the clerk of the works, towards repairing and beautifying the said cathedral: which has accordingly been paid ever since; and care taken not only of carrying on the necessary repairs in the most durable and substantial manner, but due regard has likewise been paid to the propriety of the ornamental parts restored, and their conformity with the style of building they were intended to adorn.

[y] Page 137.

constitutions ecclesiastical and civil concurred with the spirit of piety which then prevailed, in providing structures for religious worship. In subsequent ages this spirit still increased, and occasioned an emulation in raising religious [44] edifices wherever it was necessary, or in adorning those which were already raised. —The fruits of this ardour we now reap. Since then, the pious munificence of our ancestors has raised these sacred edifices, appropriated to religious uses, we are surely under the strongest obligations to repair as much as possible the injuries of time, and preserve them by every precaution from total ruin and decay. Where the particular funds appropriated to this purpose are insufficient, it becomes necessary to apply to the affluent, who cannot surely refuse to prevent by their liberal contributions the severe reproach of neglecting those structures which in all ages have been held sacred.

" Horace tells the Roman people,

> Dii multa neglecti dederunt
> Hesperiæ mala luctuosæ;

and assures them their misfortunes will not end till they repair the temples of their gods:

> Delicta majorum immeritus lues,
> Romane, donec templa refeceris,
> Ædesque labentes deorum, et
> Fœda nigro simulacra fumo.

This may safely be applied to the Christian world; since the fabrics appropriated to the purposes of religion can never be entirely neglected till a total disregard to religion first prevails, and men have lost a sense of every thing that is virtuous and decent. Whenever this is the melancholy condition of a nation, it cannot hope for, because it does not deserve, the protection of Heaven; and it will be difficult to conceive a general reformation can take place till the temples of the Deity are restored to their proper dignity, and the public worship of God is conducted in the beauty of holiness."

CAPTAIN GROSE'S ESSAY [a].

AS MANY OF THE NOTES QUOTED BY CAPTAIN GROSE FROM MR. BENTHAM ARE VERY LONG, TO AVOID A REPETITION, SUCH NOTES WILL BE REFERRED TO, SIMILARLY TO THAT BELOW, MENTIONING THE PAGE WHERE THE PASSAGE IS TO BE FOUND IN MR. BENTHAM'S ESSAY.

MOST of the writers who mention our ancient buildings, particularly the religious ones, notwithstanding the striking difference in the styles of their construction, class them all under the common denomination of Gothic: a general appellation by them applied to all buildings not exactly conformable to some one of the five orders of architecture. Our modern antiquaries, more accurately, divide them into Saxon, Norman, and Saracenic; or that species vulgarly, though improperly called Gothic.

An opinion has long prevailed, chiefly countenanced by Mr. Somner [b], that the Saxon churches were mostly built with timber; and

[a] This is Captain Grose's Preface to the Antiquities of England, on the subject of Architecture.

[b] Indeed, it is to be observed, that before the Norman advent most of our monasteries and church buildings were all of wood: "All the monasteries of my realm," saith king Edgar]—["till the Normans brought it over with them from France." Somner's Antiq. Canterbury. (See Mr. Bentham's Essay, p. 18, 19, 20.)

that the few they had of stone consisted only of upright walls, without pillars or arches; the construction of which, it is pretended, they were entirely ignorant of. Mr. Somner seems to have founded his opinion on the authority of Stowe, and a disputable interpretation of some words in king Edgar's charter [b]: "Meaning no more, as I apprehend," says Mr. Bentham, in his curious Remarks on Saxon Churches, "than that the churches and monasteries were in general so much decayed, that the roofs were uncovered or bare to the timber; and the beams rotted by neglect, and overgrown with moss." It is true that Bede and others speak of churches built with timber; but these appear to have been only temporary erections, hastily run up for the present exigency [c]; and for the other position, that the Saxons had neither arches or pillars in their buildings, it is not only contradicted by the testimony of several cotemporary or very ancient writers, who expressly mention them both, but also by the remains of some edifices

[b] "Quæ vèlut muscivis scindulis cariosisque tabulis, tigno tenus visibiliter diruta."

[c] "Baptizatus est (sc. rex Edwinus, A. D. 627) autem Eboraci in die sancto Paschæ, in ecclesiæ St. Petri apostoli quam ipse de ligno citato opere erexit." Bedæ Hist. Eccl. lib. ii. cap. 14.—"Curavit majorem ipso in loco et augustiorem de lapide fabricare basilicam, in cujus medio ipsum quod prius fecerat oratorium includeretur." Ibid.

universally allowed to be of Saxon workmanship; one of them the ancient conventual church at Ely.

The writers here alluded to are, Alcuin, an ecclesiastic who lived in the eighth century; and, in a poem entitled De Ponteficibus Ecclesiæ Ebor. published by D. Gale, A. D. 1691, describes the church of St. Peter at York; which he himself, in conjunction with Eanbald, had assisted archbishop Albert to rebuild. In this poem he particularizes by name both columns and arches, as may be seen in note [d].

The author of the Description of the Abbey of Ramsay in Huntingdonshire, which was founded A. D. 974, by Ailwood, styled alderman of all England, assisted therein by Oswald bishop of Worcester, in that account names both arches and columns, as is shown in note [e].

Richard prior of Hexham, who flourished about the year 1180, and left a description of that church, part of which was standing in his

[d] "Ast nova basilicæ miræ structura diebus," &c.]
(This note is the same as Mr. Bentham gives, p. 46.)

[e] "Duæ quoque turres ipsis tectorum culminibus eminebant, quarum minor versus occidentem, in fronte basilicæ pulchram intrantibus insulam a longe spectaculum præbebat; major vero in quadrifidæ structuræ medio columnas quatuor, porrectis de alia ad aliam arcubus sibi invicem connexus, ne laxè defluerunt, deprimebat." Hist. Ramesiensis, inter XV. Scriptores, edit. per Gale.

time, though built by Wilfrid, anno 674; he likewise speaks of arches and columns with their capitals richly ornamented: see note [f].

Many more authorities might be cited, was not the matter sufficiently clear. Indeed it is highly improbable that the Saxons could be ignorant of so useful a contrivance as the arch; many of them built by the Romans they must have had before their eyes; some of which have reached our days; two particularly are now remaining in Canterbury only; one in the castle yard, the other at Riding-gate. And it is not to be believed, that, once knowing them, and their convenience, they would neglect to make use of them; or, having used, would relinquish them. Besides, as it appears from undoubted authorities, they procured workmen from the continent [g] to

[f] "Profunditatem ipsius ecclesiæ criptis, et oratoriis subterraneis."] This note is the same as Mr. Bentham quotes, p. 35.

[g] "Cum cantoribus Ædde et Eona, et cæmentariis, omnisque pene artis ministerio in regionem suam revertens, cum regula Benedicti instituta ecclesiarum Dei bene melioravit." Eddii Vit. St. Wilfridi, cap. xiv. Bedæ Hist. Eccl. lib. iv. cap. 2.—"De Roma quoque, et Italia, et Francia, et de aliis terris ubicunque invenire poterat, cæmentarios et quoslibet alios industrios artifices secum retinuerat, et ad opera sua facienda secum in Angliam adduxerat." Rich. Prior. Hagulst. lib. i. cap. 5.

"St. Peter's church, in the monastery of Weremouth, in the neighbourhood of Gyrwi, was built by the famous Benedict Biscopius, in the year 675. This abbat went over into France to engage workmen to build his church after the Roman manner (as it is called by Bede in his History of

construct their capital buildings "according to the Roman manner," this alone would be sufficient to confute that ill-grounded opinion; and at the same time proves that what we commonly call Saxon is in reality Roman architecture.

This was the style of building practised all over Europe; and it continued to be used by the Normans, after their arrival here, till the introduction of what is called the Gothic, which was not till about the end of the reign

Weremouth), and brought them over for that purpose: he prosecuted this work with extraordinary zeal and diligence, insomuch that, within the compass of a year after the foundations were laid, he caused the roof to be put on, and divine service to be performed in it. Afterwards when the building was near finished, he sent over to France for artificers skilled in the mystery of making glass (an art till that time unknown to the inhabitants of Britain), to glaze the windows both of the porticos and principal parts of the church; which work they not only executed, but taught the English nation that most useful art." Bentham's History of Ely, p. 31 of this edition.

What Bede here affirms of the abbat Benedict, that he first introduced the art of making glass into this kingdom, is by no means inconsistent with Eddius's account of bishop Wilfrid's glazing the windows of St. Peter's church at York, about the year 669, *i. e.* seven or eight years before this time; for glass might have been imported from abroad by Wilfrid. But Benedict first brought over the artists who taught the Saxons the art of making glass: That the windows in churches were usually glazed in that age abroad, as well as in these parts, we learn from Bede; who, speaking of the church on Mount Olivet, about a mile from Jerusalem, says, "In the west front of it were eight windows, which on some occasions used to be illuminated with lamps, which shone so bright through the glass, that the mount seemed in a blaze." Bedæ Lib. de Locis Sanctis, cap. vi.

of Henry II.; so that there seems to be little or no ground for a distinction between the Saxon and Norman architecture. Indeed, it is said the buildings of the latter were of larger dimensions, both in height and area; and they were constructed with a stone brought from Caen in Normandy, of which their workmen were peculiarly fond; but this was simply an alteration in the scale and materials, and not in the manner of the building. The ancient parts of most of our cathedrals are of this early Norman work.

The characteristic marks of this style are these: the walls are very thick, generally without buttresses; the arches, both within and without, as well as those over the doors and windows, semi-circular, and supported by very solid, or rather clumsy columns, with a kind of regular base and capital: in short, plainness and solidity constitute the striking features of this method of building. Nevertheless, the architects of those days sometimes deviated from this rule: their capitals were adorned with carvings of foliage, and even animals; and their massive columns decorated with small half-columns united to them, and their surfaces ornamented with spirals, squares, lozenge net-work, and other figures, either engraved or in relievo: various instances of these may be seen in the cathedral of Can-

terbury, particularly the under-croft, the monastery at Lindisfarn or Holy Island, the cathedral at Durham, and the ruined choir at Orford in Suffolk. Their arches too, though generally plain, sometimes came in for more than their share of ornaments; particularly those over the chief doors: some of these were overloaded with a profusion of carving.

It would be impossible to describe the different ornaments there crowded together; which seem to be more the extemporaneous product of a grotesque imagination than the result of any particular design. On some of these arches is commonly over the key-stone, represented God the Father, or our Saviour, surrounded with angels; and below a melange of foliage, animals, often ludicrous, and sometimes even indecent subjects. Partly of this sort is the great door at Barfreston church in Kent. The frizes round churches were also occasionally ornamented with grotesque human heads, monsters, figures playing on different musical instruments, and other whimsical devices, of which the church at Barfreston above mentioned, and that of Adderbury in Suffolk, afford striking specimens.

The idea of these artists seems to have been, that the greater number of small and dissimilar subjects they could there assemble, the more beautiful they rendered their work.

It is not however to be denied, that the extreme richness of these inferior parts served, by their striking contrast, to set off the venerable plainness of the rest of the building; a circumstance wanting in the Gothic structures; which, being equally ornamented all over, fatigue and distract, rather than gratify the eye.

I would not here be understood to assert that all the Saxon ornamented arches were devoid of beauty and taste; on the contrary, there are several wherein both are displayed, particularly in some belonging to the church of Ely. Besides the ornaments here mentioned, which seem always to have been left to the fancy of the sculptor, they had others, which were in common use, and are more regular. Most of them are mentioned by Mr. Bentham in his ingenious preface to the History of Ely [h]; and specimens of them are given in the miscellaneous plates.

About the time of Alfred probably, but certainly in the reign of Edgar [i], high towers and cross aisles were first introduced: the Saxon churches till then being only square or

[h] "As to their archēs, though they were for the most part plain and simple, yet some of their principal ones as they contribute to ascertain the age of an edifice at first sight." (See Mr. Bentham, p. 68, 69, 70, to the end of the paragraph.)

[i] Vide note [e], p. 96.

oblong buildings, generally turned semi-circularly at the east end. Towers at first scarcely rose higher than the roof; being intended chiefly as a kind of lantern for the admittance of light. An addition to their height was in all likelihood suggested on the more common use of bells; which, though mentioned in some of our monasteries in the seventh century, were not in use in churches till near the middle of the tenth.

To what country or people the style of architecture called Gothic owes its origin is by no means satisfactorily determined[k]. It is indeed generally conjectured to be of Arabian extraction, and to have been introduced into Europe by some persons returning from the crusades in the Holy Land. Sir Christopher Wren[l] was of that

[k] "The style of building with pointed arches is modern, and seems not to have been known in the world till the Goths ceased," &c.]—["it is of king Stephen's time; whether they were originally pierced I cannot learn." (See Mr. Bentham, p. 75, 76.)

[l] "These surveys, and other occasional inspections of the most noted cathedral churches and chapels in England and foreign parts; a discernment of no contemptible art, ingenuity, and geometrical skill in the design and execution of some few, and an affectation of height and grandeur, though without regularity and good proportion in most of them, induced the surveyor to make some enquiry into the rise and progress of this Gothic mode, and to consider how the old Greek and Roman style of building, with the several regular proportions of columns, entablatures, &c. came within a few centuries to be so much altered, and almost universally disused.

"He was of opinion (as has been mentioned in another

place) that what we now vulgarly call the Gothic ought properly and truly to be named the Saracenic architecture, refined by the Christians; which first of all began in the East, after the fall of the Greek empire, by the prodigious success of those people that adhered to Mahomet's doctrine; who, out of zeal to their religion, built mosques, caravanseras, and sepulchres wherever they came.

"These they contrived of a round form, because they would not imitate the Christian figure of a cross, nor the old Greek manner, which they thought to be idolatrous; and for that reason all sculpture became offensive to them.

"They then fell into a new mode of their own invention, though it might have been expected with better sense, considering the Arabians wanted not geometricians in that age; nor the Moors, who translated many of the most useful old Greek books. As they propagated their religion with great diligence, so they built mosques in all their conquered cities in haste.

"The quarries of great marble by which the vanquished nations of Syria, Egypt, and all the East had been supplied for columns, architraves, and great stones, were now deserted; the Saracens therefore were necessitated to accommodate their architecture to such materials, whether marble or freestone, as every country readily afforded. They thought columns and heavy cornices impertinent, and might be omitted; and affecting the round form for mosques, they elevated cupolas in some instances with grace enough.

"The Holy war gave the Christians who had been there an idea of the Saracen works; which were afterwards by them imitated in the West: and they refined upon it every day, as they proceeded in building churches. The Italians (among which were yet some Greek refugees), and with them French, Germans, and Flemings, joined into a fraternity of architects; procuring papal bulls for their encouragement, and particular privileges: they styled themselves freemasons, and ranged from one nation to another as they found churches to be built (for very many in those ages were every where in building, through piety or emulation).

"Their government was regular, and where they fixed near the building in hand they made a camp of huts. A surveyor governed in chief; every tenth man was called a warden, and overlooked each nine: the gentlemen of the neighbourhood, either out of charity or commutation of penance, gave the materials and carriages. Those who have seen the exact accounts in records of the charge of the fabrics of some of our cathedrals, near four hundred years old, cannot but have

a great esteem for their economy, and admire how soon they erected such lofty structures. Indeed, great height they thought the greatest magnificence: few stones were used but what a man might carry up a ladder on his back from scaffold to scaffold, though they had pullies and spoked wheels upon occasion; but having rejected cornices, they had no need of great engines: stone upon stone was easily piled up to great heights; therefore the pride of their works was in pinnacles and steeples.

"In this they essentially differed from the Roman way, who laid all their mouldings horizontally, which made the best perspective: the Gothic way on the contrary, carried all their mouldings perpendicular; so that the ground-work being settled, they had nothing else to do but to spire all up as they could. Thus they made their pillars of a bundle of little torus's, which they divided into more when they came to the roof; and these torus's split into many small ones, and traversing one another, gave occasion to the tracery work, as they call it, of which the society were the inventors. They used the sharp-headed arch, which would rise with little centring, required lighter key-stones and less buttment, and yet would bear another row of doubled arches, rising from the key-stone; by the diversifying of which they erected eminent structures; such as the steeples of Vienna, Strasburg, and many others. They affected steeples, though the Saracens themselves most used cupolas. The church of St. Mark at Venice is built after the Saracen manner. Glass began to be used in windows, and a great part of the outside ornaments of churches consisted in the tracery works of disposing the mullions of the windows for the better fixing in of the glass. Thus the work required fewer materials, and the workmanship was for the most part performed by flat moulds, in which the wardens could easily instruct hundreds of artificers. It must be confessed this was an ingenious compendium of work suited to these northern climates; and I must also own, that works of the same height and magnificence in the Roman way would be very much more expensive than in the other Gothic manner, managed with judgment. But as all modes, when once the old rational ways are despised, turn at last into unbounded fancies, this tracery induced too much mincing of the stone into open battlements, and spindling pinnacles, and little carvings without proportion of distance; so the essential rules of good perspective and duration were forgot. But about two hundred years ago, when ingenious men began to reform the Roman language to the

purity which they assigned and fixed to the time of Augustus, and that century; the architects also, ashamed of the modern barbarity of building, began to examine carefully the ruins of old Rome and Italy, to search into the orders and proportions, and to establish them by inviolable rules; so to their labours and industry we owe in a great degree the restoration of architecture.

" The ingenious Mr. Evelyn makes a general and judicious comparison, in his Account of Architecture, of the ancient and modern styles; with reference to some of the particular works of Inigo Jones, and the surveyor; which in a few words give a right idea of the majestic symmetry of the one, and the absurd system of the other.—' The ancient Greek and Roman archi-
' tecture answer all the perfections required in a faultless and
' accomplished building; such as for so many ages were so
' renowned and reputed by the universal suffrages of the
' civilized world; and would doubtless have still subsisted and
' made good their claim, and what is recorded of them, had
' not the Goths, Vandals, and other barbarous nations
' subverted and demolished them, together with that glorious
' empire where those stately and pompous monuments stood;
' introducing in their stead a certain fantastical and licentious
' manner of building, which we have since called modern
' or Gothic:—congestions of heavy, dark, melancholy, and
' monkish piles, without any just proportion, use, or beauty,
' compared with the truly ancient; so as when we meet with
' the greatest industry and expensive carving, full of fret and
' lamentable imagery, sparing neither of pains nor cost, a
' judicious spectator is rather distracted, or quite confounded,
' than touched with that admiration which results from the true
' and just symmetry, regular proportion, union, and dis-
' position; and from the great and noble manner in which the
' august and glorious fabrics of the ancients are executed.'

" It was after the irruption of swarms of those truculent people from the north, the Moors and Arabs from the south and east, over-running the civilized world, that wherever they fixed themselves they soon began to debauch this noble and useful art; when, instead of those beautiful orders, so majestical and proper for their stations, becoming variety, and other ornamental accessories, they set up those slender and misshapen pillars, or rather bundles of staves, and other incongruous props, to support incumbent weights and ponderous arched roofs, without entablature; and though not without great industry (as M. d'Aviler well observes), nor altogether

opinion[m]; and it has been subscribed to by most writers who have treated on this sub-

naked of gaudy sculpture, trite and busy carvings, it is such as gluts the eye rather than gratifies and pleases it with any reasonable satisfaction. For proof of this without travelling far abroad, I dare report myself to any man of judgment, and that has the least taste of order and magnificence, if, after he has looked awhile upon king Henry the Seventh's chapel at Westminster, gazed on its sharp angles, jetties, narrow lights, lame statues, lace, and other cut work and crinkle-crankle, and shall then turn his eyes on the Banqueting-house, built at Whitehall by Inigo Jones, after the ancient manner; or on what his Majesty's surveyor, Sir Christopher Wren, has advanced at St. Paul's, and consider what a glorious object the cupola, porticos, colonnades, and other parts present to the beholder; or compare the schools and library at Oxford with the theatre there; or what he has built at Trinity College in Cambridge; and since all these, at Greenwich and other places, by which time our home traveller will begin to have a just idea of the ancient and modern architecture; I say, let him well consider and compare them judicially, without partiality and prejudice, and then pronounce which of the two manners strikes the understanding as well as the eye with the more majesty and solemn greatness; though in so much a plainer and simple dress, conform to the respective orders and entablature: and accordingly determine to whom the preference is due: not as we said, that there is not something of solid, and oddly artificial too, after a sort. But then the universal and unreasonable thickness of the walls, clumsy buttresses, towers, sharp-pointed arches, doors, and other apertures without proportion; nonsensical insertions of various marbles impertinently placed; turrets and pinnacles thick set with monkies and chimeras, and abundance of busy work, and other incongruities, dissipate and break the angles of the sight, and so confound it, that one cannot consider it with any steadiness, where to begin or end; taking off from that noble air and grandeur, bold and graceful manner, which the ancients had so well and judiciously established. But in this sort have they and their followers ever since filled not Europe alone, but Asia and Africa besides, with mountains of stone; vast and gigantic buildings indeed! but not worthy the name of architecture, &c." Wren's Parentalia, p. 306.

[m] "This we now call the Gothic manner of architecture

ject[n]. If the supposition is well grounded, it seems likely that many ancient buildings of this kind, or at least their remains, would be found in those countries from whence it is said to have been brought; parts of which have at different times been visited by several

(so the Italians called what was not after the Roman style), though the Goths were rather destroyers than builders: I think it should with more reason be called the Saracen style; for those people wanted neither arts nor learning; and after we in the West had lost both, we borrowed again from them, out of their Arabic books, what they with great diligence had translated from the Greeks. They were zealots in their religion; and wherever they conquered (which was with amazing rapidity) erected mosques and caravanseras in haste, which obliged them to fall into another way of building; for they built their mosques round, disliking the Christian form of a cross. The old quarries, whence the ancients took their large blocks of marble for whole columns and architraves, were neglected; and they thought both impertinent. Their carriage was by camels; therefore their buildings were fitted for small stones, and columns of their own fancy, consisting of many pieces; and their arches pointed without key-stones, which they thought too heavy. The reasons were the same in our northern climates, abounding in freestone, but wanting marble." Wren's Parentalia, p. 297.

[n] "Modern Gothic, as it is called, is deduced from a different quarter; it is distinquished by the lightness of its work, by the excessive boldness of its elevations, and of its sections; by the delicacy, profusion, and extravagant fancy of its ornaments. The pillars of this kind are as slender as those of the ancient Gothic are massive: such productions, so airy, cannot admit the heavy Goths for their author; how can be attributed to them a style of architecture which was only introduced in the tenth century of our æra? several years after the destruction of all those kingdoms which the Goths had raised upon the ruins of the Roman empire, and at a time when the very name of Goth was entirely forgotten: from all the marks of the new architecture it can only be attributed to the Moors; or, what is the same thing, to the Arabians or Saracens; who

curious travellers, many of whom have made designs of what they thought most remarkable. Whether they overlooked or neglected these buildings, as being in search of those of more remote antiquity, or whether none existed, seems doubtful. Cornelius le Brun, an

have expressed in their architecture the same taste as in their poetry; both the one and the other falsely delicate, crowded with superfluous ornaments, and often very unnatural; the imagination is highly worked up in both; but it is an extravagant imagination; and this has rendered the edifices of the Arabians (we may include the other orientals) as extraordinary as their thoughts. If any one doubts of this assertion, let us appeal to any one who has seen the mosques and palaces of Fez, or some of the cathedrals in Spain, built by the Moors: one model of this sort is the church at Burgos; and even in this island there are not wanting several examples of the same: such buildings have been vulgarly called Modern Gothic, but their true appellation is Arabic, Saracenic, or Moresque. This manner was introduced into Europe through Spain; learning flourished among the Arabians all the time that their dominion was in full power; they studied philosophy, mathematics, physic, and poetry. The love of learning was at once excited; in all places that were not at too great distance from Spain these authors were read; and such of the Greek authors as they had translated into Arabic, were from thence turned into Latin. The physic and philosophy of the Arabians spread themselves in Europe, and with these their architecture: many churches were built after the Saracenic mode; and others with a mixture of heavy and light proportions: the alteration that the difference of the climate might require was little, if at all, considered. In most southern parts of Europe and in Africa, the windows (before the use of glass), made with narrow apertures, and placed very high in the walls of the building, occasioned a shade and darkness withinside, and were all contrived to guard against the fierce rays of the sun; yet were ill suited to those latitudes, where that glorious luminary shades its feebler influences, and is rarely seen but through a watery cloud." Rious's Architecture.

indefatigable and inquisitive traveller, has published many views of eastern buildings, particularly about the Holy Land; in all these only one Gothic ruin, the church near Acre, and a few pointed arches, occur; and those built by the Christians, when in possession of the country. Near Ispahan, in Persia, he gives several buildings with pointed arches; but these are bridges and caravanseras, whose age cannot be ascertained; consequently, are as likely to have been built after as before the introduction of this style into Europe.

At Ispahan itself, the Mey Doen, or grand market-place, is surrounded by divers magnificent Gothic buildings; particularly the royal mosque, and the Talael Ali-kapie, or theatre. The magnificent bridge of Alla-werdie-chan, over the river Zenderoet, five hundred and forty paces long, and seventeen broad, having thirty-three pointed arches, is also a Gothic structure: but no mention is made when or by whom these were built. The Chiaer Baeg, a royal garden, is decorated with Gothic buildings; but these were, it is said, built only in the reign of Scha Abbas, who died anno 1629.

One building indeed at first seems as if it would corroborate this assertion, and that the

time when it was erected might be in some degree fixed; it is the tomb of Abdulla °, one of the apostles of Mahomet, probably him surnamed Abu Becr. If this tomb is supposed to have been built soon after his death, estimating that event to have happened according to the common course of nature, it

° " Le vingt-troisième de ce mois nous allames encore en ceremonie au village de Kaladoen, à une bonne lieuë de la ville, pour y voir le tombeau d'Abdulla. On dit que ce saint avoit autrefois l'inspection des eaux d'Emoen Osseyn, et qu'il étoit un des douze desciples, ou à ce qu'ils pretendent, un des apôtres de leur prophete. Ce tombeau, qui est placé entre quatre murailles, revêtues de petites pierres, est de marbre gris, orné de caracteres Arabes, et entouré de lampes de cuivre étamées; on y monte par quinze marches d'un pied de haut, et l'on y en trouve quinze autres un peu plus élevées, qui conduisent à une platte forme quarée, qui a trente-deux pieds de large de chaque côte, et sur le devant de la quelle il y a deux colomnes de petites pierres, entre lesquelles il s'en trouve de bleuës. La base en a cinq pieds de large, et une petite porte, avec un escalier à noyeau qui a aussi quinze marches. Elles sont fort endommagées par les injures du tems, et il paroit qu'elles ont été une fois plus élevées qu'elles ne sont à present. L'escalier en est si etroit qu'il faut qu'un homme de taille ordinaire se deshabille pour y monter, comme je fis, et passai la moitié du corps au dessus de la colomne. Mais ce qu'il y a de plus extraordinaire, est que lors qu'on ébranle une des colomnes en faisant un mouvement du corps; l'autre en ressent les secousses, et est agitée du même; c'est une chose dont j'ai fait l'épreuve, sans en pouvoir comprendre, ni apprendre la raison. Pendant que j'étois occupé à dessiner ce bâtiment, qu'on trouve au No. 71, un jeune garçon de douze à treize ans, bossu par devant, grimpa en dehors, le long de la muraille, jusqu'au haut de la colomne dont il fit le tour, et redescendit de même sans se tenir à quoi que ce soit, qu'aux petites pierres de ce bâtiment, aux endroits où la chaux en étoit détachée; et il ne le fit que pour nous devertir." Voyage de Le Brun, tom. i. p. 185.

will place its erection about the middle of the seventh century: but this is by far too conjectural to be much depended on. It also seems as if this was not the common style of building at that time, from the temple of Mecca; where, if any credit is to be given to the print of it, in Sale's Korán, the arches are semi-circular. The tomb here mentioned has one evidence to prove its antiquity; that of being damaged by the injuries of time and weather. Its general appearance much resembles the east end of the chapel belonging to Ely House, London; except that which is filled up there by the great window: in the tomb is an open pointed arch; where also the columns, or pinnacles, on each side are higher in proportion.

Some have supposed that this kind of architecture was brought into Spain by the Moors (who possessed themselves of a great part of that country the beginning of the eighth century, which they held to the latter end of the fifteenth); and that from thence, by way of France [P], it was introduced into England. This at first seems plausible; though the only instance which seems to corroborate this

[P] "The Saracen mode of building seen in the East soon spread over Europe, and particularly in France, the fashions

hypothesis, or at least the only one proved by authentic drawings, is the mosque at Cordova, in Spain; where, according to the views published by Mr. Swinburne, although most

of which nation we affected to imitate in all ages, even when we were at enmity with it. Nothing was thought magnificent that was not high beyond measure, with the flutter of arch buttresses, so we call the sloping arches that poise the higher vaultings of the nave. The Romans always concealed their butments, whereas the Normans thought them ornamental. These I have observed are the first things that occasion the ruin of cathedrals, being so much exposed to the air and weather; the coping, which cannot defend them, first failing, and if they give way the vault must spread. Pinnacles are of no use, and as little ornament. The pride of a very high roof, raised above reasonable pitch, is not for duration, for the lead is apt to slip; but we are tied to this indiscreet form, and must be contented with original faults in the first design. But that which is most to be lamented, is the unhappy choice of the materials: the stone is decayed four inches deep, and falls off perpetually in great scales. I find after the Conquest all our artists were fetched from Normandy; they loved to work in their own Caen stone, which is more beautiful than durable. This was found expensive to bring hither; so they thought Ryegate stone, in Surrey, the nearest like their own, being a stone that would saw and work like wood, but not durable, as is manifest: and they used this for the ashlar of the whole fabric, which is now disfigured in the highest degree. This stone takes in water, which, being frozen, scales off; whereas good stone gathers a crust and defends itself, as many of our English freestones do. And though we have also the best oak timber in the world; yet these senseless artificers, in Westminster hall and other places, would work their chesnuts from Normandy: that timber is not natural to England; it works finely, but sooner decays than oak. The roof in the abbey is oak, but mixed with chesnut, and wrought after a bad Norman manner, that does not secure it from stretching and damaging the walls; and the water of the gutters is ill carried off. All this is said, the better, in the next place, to represent to your lordship what has been done, and is wanting still to be carried on; as time and money is allowed to make a substantial and durable repair." Wren's Parentalia, p. 298.

of the arches are circular, or horse-shoe fashion, there are some pointed arches, formed by the intersection of two segments of a circle. This mosque was, as it is there said, begun by Abdoulrahman the first, who laid the foundation two years before his death, and was finished by his son Hissem or Iscan about the year 800. If these arches were part of the original structure, it would be much in favour of the supposition; but, as it is also said, that edifice has been more than once altered and enlarged by the Mahometans, before any well-grounded conclusion can be drawn, it is necessary to ascertain the date of the present building.

There are also several pointed arches in the Moorish palace at Grenada, called the Alhambra; but as that was not built till the year 1273, long after the introduction of pointed arches into Europe, they are as likely to be borrowed by the Moors from the Christians, as by the Christians from the Moors. The greatest peculiarity in the Moorish architecture is the horse-shoe arch [q], which, containing more than a semi-circle, contracts towards its base, by which it is ren-

[q] As delineation gives a much clearer idea of forms and figures than the most laboured description, the reader is referred to the plates in Swinburne's Travels, where there are many horse-shoe arches, both round and pointed.

dered unfit to bear any considerable weight, being solely calculated for ornament. In Romesy church, Hampshire, there are several arches somewhat of that form.

In the drawings of the Moorish buildings given in Les Delices de l'Espagne, said to be faithful representations, there are no traces of the style called Gothic architecture; there, as well as in the Moorish castle at Gibraltar, the arches are all represented circular. Perhaps a more general knowledge of these buildings would throw some lights on the subject, at present almost entirely enveloped in obscurity: possibly the Moors may, like us, at different periods, have used different manners of building. Having thus in vain attempted to discover from whence we had this style, let us turn to what is more certainly known, the time of its introduction into this kingdom, and the successive improvements and changes it has undergone.

Its first appearance here was towards the latter end of the reign of king Henry II. but it was not at once thoroughly adopted; some short solid columns, and semi-circular arches, being retained and mixed with the pointed ones. An example of this is seen in the west end of the old Temple church; and at York, where, under the choir, there remains much

of the ancient work; the arches of which are but just pointed, and rise on short round pillars; both these were built in that reign. More instances might be brought, was not the thing probable in itself; new inventions, even when useful, not being readily received. The great west tower of Ely cathedral was built by bishop Rydel, about this time: those arches were all pointed.

In the reign of Henry III. this manner of building seems to have gained a complete footing; the circular giving place to the pointed arch, and the massive column yielding to the slender pillar. Indeed, like all novelties, when once admitted, the rage of fashion made it become so prevalent, that many of the ancient and solid buildings, erected in former ages, were taken down, in order to be re-edified in the new taste; or had additions patched to them of this mode of architecture. The present cathedral church of Salisbury was begun early in this reign, and finished in the year 1258. It is entirely in the Gothic style, and, according to Sir Christopher Wren, may be justly accounted one of the best patterns of architecture of the age in which it was built. Its excellency is undoubtedly in a great measure owing to its being constructed on one plan; whence

arises that symmetry and agreement of parts not to be met with in many of our other cathedral churches, which have mostly been built at different times, and in a variety of styles. The fashionable manner of building at this period, and till the reign of Henry VIII. as is described by Mr. Bentham, see in note [r].

In the beginning of the reign of Henry VIII. or rather towards the latter end of that of Henry VII. when brick building became common, a new kind of low pointed arch grew much in use: it was described from four centres, was very round at the haunches, and the angle at the top was very obtuse. This sort of arch is to be found in every one of cardinal Woolsey's buildings; also at West Sheen; an ancient brick gate at Mile End, called King John's Gate; and in the great gate of the palace of Lambeth. From this time Gothic architecture began to decline, and was soon after supplanted by a mixed style, if one may venture to call it one; wherein the Grecian and Gothic, however discordant and irreconcilable, are jumbled together. Concerning this mode of building,

[r] "During the whole reign of Henry III. the fashionable pillars to our churches were"]—["one can hardly help concluding, that architecture arrived at its highest point of glory in this kingdom but just before its final period." (See Mr. Bentham, p. 80—87.)

Mr. Warton, in his Observations on Spenser's Fairy Queen, has the following anecdotes and remarks:

——— Did arise
On stately pillours framd afer the Doricke guise.

"Although the Roman or Grecian architecture did not begin to prevail in England till the time of Inigo Jones; yet our communication with the Italians, and our imitation of their manners, produced some specimens of that style much earlier. Perhaps the earliest is Somerset house in the Strand, built about the year 1549, by the Duke of Somerset, uncle to Edward VI. The monument of Bishop Gardiner, in Winchester cathedral, made in the reign of Mary, about 1555, is decorated with Ionic pillars; Spenser's verses here quoted bear an allusion to some of these fashionable improvements in building, which at this time were growing more and more into esteem. Thus also bishop Hall, who wrote about the same time; viz. 1598:

There findest thou some stately Doricke frame,
Or neat Ionicke work.——

But these ornaments were often absurdly introduced into the old Gothic style; as in the magnificent portico of the Schools at Oxford, erected about the year 1613; where the

builder, in a Gothic edifice, has affectedly displayed his universal skill in the modern architecture, by giving us all the five orders together. However, most of the great buildings of Queen Elizabeth's reign have a style peculiar to themselves both in form and finishing; where, though much of the old Gothic is retained, and great part of the new taste is adopted, yet neither predominates; while both, thus distinctly blended, compose a fantastic species hardly reducible to any class or name. One of its characteristics is the affectation of large and lofty windows; where, says Bacon, you shall have sometimes fair houses so full of glass that one cannot tell where to become to be out of the sun."

The marks which constitute the character of Gothic or Saracenical architecture, are, its numerous and prominent buttresses, its lofty spires and pinnacles, its large and ramified windows, its ornamental niches or canopies, its sculptured saints, the delicate lace-work of its fretted roofs, and the profusion of ornaments lavished indiscriminately over the whole building: but its peculiar distinguishing characteristics are, the small clustered pillars and pointed arches, formed by the segments of two intersecting circles; which arches, though last brought into use, are evidently of more

simple and obvious construction than the semi-circular ones; two flat stones, with their tops inclined to each other, and touching, form its rudiments; a number of boughs stuck into the ground opposite each other, and tied together at the top, in order to form a bower, exactly describe it: whereas a semi-circular arch appears the result of a deeper contrivance, as consisting of more parts; and it seems less probable, chance, from whence all these inventions were first derived, should throw several wedge-like stones between two set perpendicular, so as exactly to fit and fill up the interval.

Bishop Warburton, in his notes on Pope's Epistles, in the octavo edition, has some ingenious observations on this subject, which are given in the note[s]: to which it may

[s] "Our Gothic ancestors had juster and manlier notions of magnificence, on Greek and Roman ideas, than these mimics of taste who profess to study only classic elegance: and because the thing does honour to the genius of those barbarians, I shall endeavour to explain it. All our ancient churches are called without distinction Gothic, but erroneously. They are of two sorts; the one built in the Saxon times, the other in the Norman. Several cathedral and collegiate churches of the first sort are yet remaining, either in whole or in part; of which this was the original: when the Saxon kings became Christians, their piety (which was the piety of the times) consisted chiefly in building churches at home, and performing pilgrimages abroad, especially to the Holy Land: and these spiritual exercises assisted and supported one another. For the most venerable as well as most elegant models of religious edifices were then in Palestine. From

not be improper to add some particulars relative to Caen stone, with which many

these the Saxon builders took the whole of their ideas, as may be seen by comparing the drawings which travellers have given us of the churches yet standing in that country, with the Saxon remains of what we find at home; and particularly in that sameness of style in the latter religious edifices of the knights templars (professedly built upon the model of the church of the Holy Sepulchre at Jerusalem) with the earlier remains of our Saxon edifices. Now the architecture of the Holy Land was Grecian, but greatly fallen from its ancient elegance. Our Saxon performance was indeed a bad copy of it; and as much inferior to the works of St. Helene and Justinian as theirs were to the Grecian models they had followed: yet still the footsteps of ancient art appeared in the circular arches, the entire columns, the division of the entablature into a sort of architrave, frize, and corniche, and a solidity equally diffused over the whole mass. This, by way of distinction, I would call the Saxon architecture. But our Norman works had a very different original. When the Goths had conquered Spain, and the genial warmth of the climate and the religion of the old inhabitants had ripened their wits and inflamed their mistaken piety (both kept in exercise by the neighbourhood of the Saracens, through emulation of their service and aversion to their superstition), they struck out a new species of architecture, unknown to Greece and Rome; upon original principles, and ideas much nobler than what had given birth even to classical magnificence. For this northern people having been accustomed, during the gloom of Paganism, to worship the Deity in groves, (a practice common to all nations) when their new religion required covered edifices, they ingeniously projected to make them resemble groves as nearly as the distance of architecture would permit; at once indulging their old prejudices and providing for their present conveniences by a cool receptacle in a sultry climate; and with what skill and success they executed the project, by the assistance of Saracen architects, whose exotic style of building very luckily suited their purpose, appears from hence, that no attentive observer ever viewed a regular avenue of well-grown trees, intermixing their branches over head, but it presently put him in mind of the long visto through the Gothic cathedral; or even entered one of the larger and more elegant edifices of this kind, but it pre-

of our ancient cathedrals are built, as extracted from some curious records originally

sented to his imagination an avenue of trees; and this alone is what can be truly called the Gothic style of building. Under this idea of so extraordinary a species of architecture, all the irregular transgressions against art, all the monstrous offences against nature, disappear; every thing has its reason, every thing is in order, and an harmonious whole arises from the studious application of means proper and proportioned to the end. For could the arches be otherwise than pointed, when the workmen were to imitate that curve which branches of two opposite trees make by their insertion with one another; or could the columns be otherways than split into distinct shafts when they were to represent the stems of a clump of trees growing close together? On the same principles they formed the spreading ramification of the stone-work in the windows, and the stained glass in the interstices; the one to represent the branches, and the other the leaves, of an opening grove: and both concurred to preserve that gloomy light which inspires religious reverence and dread. Lastly, we see the reason of their studied aversion to apparent solidity in these stupendous masses, deemed so absurd by men accustomed to the apparent as well as real strength of Grecian architecture. Had it been only a wanton exercise of the artist's skill to show he could give real strength without the appearance of any, we might indeed admire his superior science; but we must needs condemn his ill judgment. But when one considers that this surprising lightness was necessary to complete the execution of his idea of a sylvan place of worship, one cannot sufficiently admire the ingenuity of the contrivance. This too will account for the contrary qualities in what I call the Saxon architecture. These artists copied, as has been said, from the churches in the Holy Land, which were built on the models of the Grecian architecture, but corrupted by prevailing barbarism; and still further depraved by a religious idea. The first places of Christian worship were sepulchres and subterraneous caverns, low and heavy from necessity. When Christianity became the religion of the state, and sumptuous temples began to be erected, they yet, in regard to the first pious ages, preserved the massive style, made still more venerable by the church of the Holy Sepulchre; where this style was, on a double account, followed and aggravated."

given in Dr. Ducarrel's Anglo Norman Antiquities [t].

I shall close this article with recommending it to such as desire more knowledge of these matters than is communicated in this slight compilation, to peruse Wren's Parentalia, Warton's Thoughts on Spenser's Fairy Queen,

[t] In page 7 of his preface, it is said, that the keeps of the ancient castles were coined, and their arches faced with stone, brought from Caen in Normandy. A curious gentleman has favoured me with the following particulars respecting this stone: formerly vast quantities of this stone were brought to England; London bridge, Westminster abbey, and many other edifices, being built therewith. See Stow's Survey of London, edit. 1633, p. 31, 32, &c. See also Rot. Liter. patent. Norman. de anno 6 Hen. V. p. 1, m. 22.—"De quarreris albæ petræ in suburbio villæ de Caen annexandis dominio regis pro reparatione ecclesiarum, castrorum, et fortalitiorum, tam in Anglia quam in Normannia." See also Rot. Normanniæ, de anno 9 Hen. V. m. 31, dors. —"Arrestando naves pro transportatione lapidum et petrarum, pro constructione abbatiæ sancti Petri de Westminster a partibus Cadomi." Ibid. m. 30.—"Pro domo Jesu de Bethleem de Sheene, de lapidibus in quarreris circa villam de Cadomo capiendis pro constructione ecclesiæ, claustri, et cellarum domus predictæ." See also Rot. Franciæ, de anno 35 Hen. VI. m. 2.—"Pro salvo conductu ad supplicationem abbatis et conventus beati Petri Westmonasterii, pro mercatoribus de Caen in Normannia, veniendis in Angliam cum lapidibus de Caen pro reparatione monasterii prædicti. Teste rege apud Westm. 15 die Augusti." See also Rot. Franciæ, de anno 38 Hen. VI. m. 23.—"De salvo conductu pro nave de Caen in regnum Angliæ revenienda, cum lapidibus de Caen pro reparatione monasterii de Westminster. Teste rege apud Westm. 9. die Maii."—Now, however, the exportation of this stone out of France is so strictly prohibited, that when it is to be sent by sea, the owner of the stone, as well as the master of the vessel on board which it is to be shipped, is obliged to give security that it shall not be sold to foreigners.

and the Ornaments of Churches considered; but above all, Mr. Bentham's Dissertation on Saxon and Norman architecture, prefixed to his History of Ely, to which the author of this account esteems himself much beholden.

REV. J. MILNER'S ESSAY,

ON THE RISE AND PROGRESS OF THE POINTED ARCH [a].

THE church of St. Cross, which is regularly built, in the cathedral form, consists of a nave and side aisles 150 feet long, a transept which measures 120 feet, and a large square tower over the intersection. It is entirely the work of De Blois, except the front and upper story of the west end, which are of a latter date, and seems to have been an effort of that great encourager of the arts [b] to produce a style of architecture more excellent, and better adapted to ecclesiastical purposes, than what had hitherto been known. This style accordingly soon after made its appearance in a regular shape. The building before us

[a] History and Survey of the Antiquities of Winchester, vol. ii. p. 148.

[b] "Hic quicquam in bestiis, quicquam in avibus, quicquam in monstris terrarum variis peregrinum magis, et præ oculis hominum vehementius obstupendum et admirandum audire vel excogitare potuerat, tanquam innatæ nobilitatis indicia congerebat. Præterea opera mira, palatia sumptuosissima, stagna grandia, ductus aquarum difficiles ipogeosque, varia per loca meatus, denique ea quæ regibus terrarum magnis difficillima factu visa sunt hactenus et quasi desperata, effectui mancipari tanquam facillima, mira magnanimitate procurabat." Girald. Cambrens. De Hen. Bles. Copula Tergemina.

seems to be a collection of architectural essays, with respect to the disposition and form both of the essential parts and of the subordinate ornaments. Here we find the ponderous Saxon pillar of the same dimensions in its circumference as in its length, which, however, supports an incipient pointed arch. The windows and arches are some of them short, with semi-circular heads, and some of them immoderately long, and terminating like a lance. Others are in the horse-shoe form, of which the entrance into the north porch is the most curious specimen. In one place we have a curious triangular arch. The capitals and bases of the columns alternately vary in their form as well as in their ornaments. The same circumstance is observable in the ribs of the arches, especially in the north and south aisles, some of them being plain, others profusely embellished, and in different styles, even within the same arch. Here we view almost every kind of Saxon and Norman ornament, the chevron, the billet, the hatched, the pellet, the fret, the indented, the nebulé, the wavey, all superiorly executed. But what is chiefly deserving of attention in this ancient church is, what may perhaps be considered as the first regular step to the introduction of that beautiful style of architecture properly

called the *pointed*, and abusively the *Gothic*, order; concerning the origin of which most of our antiquaries have run into the most absurd systems.

Sir Christopher Wren, whose authority has seduced bishop Lowth [b], Warton, and most other writers on this subject, observing that this style of building prevailed during the time that the nobility of this and the neighbouring countries were in the habit of resorting, in quality of crusaders, to the East, then subject to the Saracens, fancied that they learnt it there, and brought it back with them into Europe. Hence they termed it the Saracenic style. But it is to be remembered, that the first or grand crusade took place at the latter end of the eleventh century, long before the appearance of the pointed architecture in England, France, or Italy, which, if it had been copied from other buildings, would have appeared amongst us all at once, in a regular and perfect form. But what absolutely decides this question is, the proof brought by Bentham and Grose, that, throughout all Syria, Arabia, &c. there is not a Gothic building to be discovered, except such as were raised by the Latin Christians subsequent to the perfection of that style in Europe. A

[b] Life of William of Wykeham.

still more extraordinary, or rather extravagant theory, than that which has been confuted, is advanced by bishop Warburton[c]. He supposes that the "Goths who conquered Spain in 470, becoming Christians, endeavoured to build their churches in imitation of the spreading and interlacing boughs of the groves in which they had been accustomed to perform their Pagan rites in their native country of Scandinavia, and that they employed for this purpose Saracen architects, whose exotic style suited their purpose." The Visigoths conquered Spain and became Christians in the fifth century; of course they began at the same time to build churches there. The Saracens did not arrive in Spain until the eighth century; when, instead of building churches, they destroyed them or turned them into mosques. In every point of view this theory ascribes to the pointed architecture too early a date by a great many centuries. But supposing even the possibility of its having lain hidden there for so long a period, certain it is, that in this case, according to our former observation, it would at last have burst upon the rest of Europe in a state of perfection, contrary to what every one knows was actually the case.

[c] Notes on Pope's Epistles.—See Captain Grose's Essay, p. 120.

But why need we recur to the caravanseries of Arabia, or to the forests of Scandinavia, for a discovery, the gradations of which we trace at home, in an age of improvement and magnificence, namely, the twelfth century, and amongst a people who were superior in arts as well as arms to all those above mentioned, namely, the Normans? About the time we are speaking of, many illustrious prelates of that nation, chiefly in our own country, exhausted their talents and wealth in carrying the magnificence of their churches and other buildings to the greatest height possible. Amongst these were Roger of Sarum, Alexander of Lincoln, Mauritius of London, and Roger of York, each of whose successive improvements were of course adopted by the rest; nevertheless, there is reason to doubt whether any or all of them contributed so much as our Henry of Winchester did to those improvements which gradually changed the Norman into the Gothic architecture.

We have remarked that the Normans, affecting height in their churches no less than length, were accustomed to pile arches and pillars upon each other, sometimes to the height of three stories, as we see in Walkelin's work in our cathedral. They frequently imi-

tated these arches and pillars in the masonry of their plain walls, and, by way of ornament and variety, they sometimes caused these plain round arches to intersect each other, as we behold in the said prelate's work, on the upper part of the south transept of Winchester cathedral, being probably the earliest instance of this interesting ornament to be met with in the kingdom. They were probably not then aware of the happy effect of this intersection, in forming the pointed arch, until De Blois, having resolved to ornament the whole sanctuary of the church at present under consideration, with these intersecting semi-circles, after richly embellishing them with mouldings and pellet ornaments, conceived the idea of opening them by way of windows, to the number of four over the altar, and of eight on each side of the choir, which at once produced a series of highly pointed arches. Pleased with the effect of this first essay at the east end, we may suppose that he tried the effect of that form in various other windows and arches which we find amongst many of the same date that are circular in various parts of the church and tower. However that matter may be, and wherever the pointed arch was first produced, its gradual ascent naturally led to a long and narrow

form of window and arch, instead of the broad circular ones which had hitherto obtained; and these required that the pillars on which they rested, or which were placed at their sides by way of ornament, should be proportionably tall and slender. Hence it became necessary to choose a material of firm texture for composing them, which occasioned the general adoption of Purbeck marble for this purpose. But even this substance being found too weak to support the incumbent weight, occasioned the shafts to be multiplied, and thus produced the cluster column. But to return to the arches and windows; these being in general very narrow, at the first discovery of the pointed arch, as we see in the ruins of Hyde abbey [d], built within thirty years after St. Cross [e]; in the refectory of Beaulieu, raised by king John; and in the inside of the tower before us, built by De Blois himself, it became necessary sometimes to place two of these windows close to each other, which not unfrequently stood under one common arch, as may be discovered in different parts of De Lucy's work in our cathedral, executed in the reign of king John, and

[d] In the part now used as a barn.

[e] Namely, when erected the second time, after having been destroyed in the civil war between king Stephen and the empress Maud.

in the lower tire of the windows in the church of Netley abbey. This disposition of two lights occasioning a dead space between their heads, a trefoil or quatrefoil, one of the simplest and most ancient kind of ornaments, was introduced between them, as in the porch of Beaulieu refectory, the ornamental work of De Lucy, in the ancient part of the Lady chapel, Winton, and the west door of the present church of St. Cross. The happy effect of this simple ornament caused the upper part of it to be introduced into the heads of the arches themselves, so that there is hardly a small arch or the resemblance of an arch of any kind, from the days of Edward II. down to those of Henry VIII. which is not ornamented in this manner. The trefoil, by an easy addition, became a cinquefoil, and being made use of in circles and squares, produced fans and Catherine's wheels. In like manner, large east and west windows beginning to obtain about the reign of Edward I. required that they should have numerous divisions or mullions, which, as well as the ribs and transoms of the vaulting, began to ramify into a great variety of tracery, according to the architect's taste, being all of them uniformly ornamented with the trefoil or cinquefoil head. The pointed arch on the outside of a building

required a canopy of the same form, which, in ornamental work, as in the tabernacle of a statue, mounted up ornamented with leaves or crockets, and terminated in a trefoil. In like manner, the buttresses that were necessary for the strength of these buildings could not finish, conformably to the general style of the building, without tapering up into ornamented pinnacles. A pinnacle of a larger size became a spire; accordingly such were raised upon the square towers of former ages, where, as at Salisbury, the funds of the church and other circumstances would permit. Thus we see how naturally the several gradations of the pointed architecture arose one out of another, as we learn from history was actually the case, and how the intersecting of two circular arches in the church of St. Cross may perhaps have produced Salisbury steeple.

A

LIST

OF

THE CATHEDRALS

OF

ENGLAND;

SHEWING

THEIR PRINCIPAL DIMENSIONS.

A

LIST,

&c.

ST. ASAPH.

	Feet.
LENGTH from east to west . .	179
——— from the east door to the choir	119
——— of the choir . . .	60
——— of the cross aisles from north to south	108
Breadth of the body and side aisles . .	68
——— of the choir	32
Height of the body, viz. from the area of the pavement to the top of the roof within .	60
——— of the tower which stands in the middle	93
Square of the tower	30

BANGOR.

	Feet.
Length from east to west . . .	214
——— of the tower at the west end . .	19
——— of nave or body	141
——— of the choir, which extends entirely to the east end, and begins beyond the cross aisle	53
——— of the cross aisles from north to south	96
Breadth of the body and side aisles . .	60
Height of the body to the top of the roof .	34
——— of the tower	60
Square of the tower	24

BATH.

Length from east to west . . .	210
——— of the cross aisles from north to south	126
Breadth of body and aisles . . .	72
Height of the tower	152
——— of the roof or vaulting . .	78

N. B. Examined by Carter's plan.

BRISTOL.

	Feet.
Length from east to west . . .	175
Whereof the choir includes 100.	
——— of the cross aisles from north to south	128
Breadth of the body and side aisles . .	73
Height of the tower	127

Chapter-house 46 by 26.

The cloisters were 103 feet square.

N. B. This is considered an incomplete or a mutilated structure.

CANTERBURY.

Length from east to west . . .	514
——— from the west door to the choir .	214
——— of the choir to the high altar .	150
——— from thence to the eastern extremity, about	150
——— of the western cross aisles from north to south	124
——— of the eastern	154
Breadth of the body and aisles . .	74
——— of the choir	40
Height of the south-west tower . .	130
——— of the north-west tower . .	100
Though when the spire of lead, taken down in August, 1705, was standing on the same, it was	200

	Feet.
Height of the centre tower . . .	235
Square of the same	35
Height of the vaulting from the pavement .	80
The cloisters are square	134

Chapter-house 92 by 37.

N. B. Examined by the Guide printed 1799.

CARLISLE.

Length from east to west . . .	219
——— has been formerly . . .	300
——— of the choir	137
——— of the cross aisles from north to south	124
Breadth of the body and aisles of the choir part	71
Height of the vaulting or roof . . .	75
——— of the tower	127

CHESTER.

Length from east to west	348
——— of the cross aisles from north to south	180
Breadth of the body and aisles . .	73
Height of the tower	127
——— of the vaulting or roof . .	73

The Transept part of this Cathedral is very irregular in the plan, that part on the south side being very large, and used as a parish church.

CHICHESTER.

	Feet.
Length from east to west . . .	392
——— of the porch	18
——— from the entrance to the eastern pier of the tower	205
——— from thence to the altar (the choir)	100
——— from thence to the extremity .	87
I am inclined to think this is not all as a Lady Chapel, but is divided.	
Length of the cross aisles from north to south	131
Breadth of the body and aisles at the west part, which has four rows of pillars .	91
——— at the east or choir part, which has only two rows of pillars . . .	62
——— of the Lady Chapel . . .	21
Height of the great tower and steeple in the middle	279
——— of which the steeple is . .	155
——— of the tower which stands on the north-west side of the church . .	107
——— of the towers at the west end .	95
——— of the roof or vaulting . .	61
Length of the cloisters from north to south	120
——— at the west end .	100
——— at the east end .	128

N. B. Corrected by a sketch from a friend.

ST. DAVID'S.

	Feet.
Length from east to west . . .	290
——— the west door to the choir .	124
——— the choir to the altar . .	80
——— of Bishop Vaughan's Chapel behind the altar	16
——— of the aisles from north to south .	120
——— from thence to the upper end of St. Mary's Chapel	56
Breadth of the body and aisles . .	76
Height of the roof, interior . . .	46
——— of the tower which stands in the middle	127

DURHAM.

Length from east to west . . .	420
——— of the nave	240
——— of the choir	117
——— of the cross aisles from north to south	176
Breadth of the body and aisles . .	80
——— of the choir	33
Height of the tower in the middle . .	212
——— at the west . .	143
——— of the roof or vaulting . .	70

The gallile at the west entrance is 50 by 78.

The cloisters are 145 feet square.

The Chapter-house 38 by 80, the east end circular.

The chapel of the nine altars, at the east end, is 134 by 38.

N. B. Examined by Carter's plans.

ELY.

	Feet.
Length from east to west . . .	517
——— of the porch	40
——— of the great west tower . .	48
——— from thence to the choir . .	327
——— of the choir	101
——— of the cross aisles from north to south	178
Breadth of the body and aisles at the west end	73
Height of the vaulting in the choir part .	70
——— of the western steeple . .	270
——— of the lantern over the middle .	170

Adjoining on the north side is another very elegant structure, now used as a parish church, which is 100 feet by 46, having a fine vaulted roof 60 feet high.

The cloisters appear to have been 100 by 150 feet.

This Cathedral having undergone a material alteration in the removal of the choir from under the lantern to the presbytery, or easternmost part, since the time of Willis, the above dimensions are taken from Bentham.

EXETER.

Length from east to west . . .	390
——— the west door to the choir .	173
——— the choir to the altar . .	131

	Feet.
Length from behind the choir to the Lady Chapel	25
——— of the Lady Chapel	61
——— of the cross aisles from north to south	140
Breadth of the body and side aisles	74
Height of the roof or vaulting	69
——— of the towers, which, different from all other cathedrals in England, stand at the extremities of the great cross aisles	140

Chapter-house 50 by 30.

N. B. Examined by Carter's plans.

GLOUCESTER.

Length from east to west, including the Lady Chapel	420
——— of the cross aisles from north to south	144
——— of the Lady Chapel	92
——— of the choir	130
——— of the nave	174
Breadth of the Lady Chapel	24
——— of the body and side aisles	84
Height of the roof of the choir	86
——— of the body	67
——— of the tower and pinnacles	216

The cloisters about 150 feet square.

Chapter-house 72 by 36.

N. B. Examined by Carter's plans.

HEREFORD.

	Feet.
Length from east to west (including the walls)	370
——— of the body or nave . . .	144
——— of the choir	105
——— from the choir to the Lady Chapel .	20
——— of the Lady Chapel . . .	73
——— of the cross aisles from north to south	140
Breadth of the body and side aisles . .	68
——— of the Lady Chapel . . .	30
Height of ditto	28
——— of the vaulting of the nave . .	68
——— in the choir . .	64
——— of the tower, west front . .	130
——— of the steeple in the middle . .	240

The cloisters 115 feet square.

Chapter-house was octagon, 37 feet diameter.

LANDAFF.

Length from east to west	150
——— from the west door to the choir .	110
——— of the choir	75
——— of St. Mary's chapel . . .	65
Breadth of the body and side aisles . .	65
Height of the roof or vaulting . . .	65
Here are no cross aisles, middle tower, or steeple; there are two towers in the west front of unequal height and not uniform: height of one tower is 89 feet, the other	105

LICHFIELD.

	Feet.
Length from east to west	411
——— from the west door to the choir	213
——— of the choir	110
——— from thence to the Lady Chapel	33
——— of the Lady Chapel	55
——— of the cross aisles from north to south	88
Breadth of the body and side aisles	67
Height of the steeple in the middle	258
——— of the two steeples in the west front	183

Chapter-house 45 by 28, of an oval form.

N. B. Examined by Shaw's Hist. Staffordshire.

LINCOLN.

Length from east to west	482
——— of the nave to the choir	252
——— of the choir	158
——— from the choir to the end	72
——— of the great or western cross aisles from north to south	222
——— of the smaller or eastern cross aisles	170
Breadth of the body and side aisles	80
Height of the tower in the middle	300
(This heretofore had a spire on it.)	
——— of which the corner pinnacles are	30
——— of the western towers and spires	270
——— of which the spires (now taken down) were about	90

	Feet.
Height of the vaulting or roof . . .	80

The Chapter-house, a decagon, supported by a central pillar, 60 feet diameter.

N. B. Corrected by a friend.

LONDON. ST. PAUL'S CATHEDRAL.

THE OLD CHURCH WHICH WAS BURNT DOWN 1666, FROM DUGDALE.

Length from east to west . . .		631
——— of the portico		41
——— from the west door to the choir .		335
——— of the choir		163
——— of the Lady Chapel . . .		92
——— of the cross aisles from north to south		297
Breadth of the body and side aisles . .		91
Height of roof or vaulting to the west part		102
——————————— choir .		88
——— of the tower steeple .	260	
——— of the spire on the same .	274	
In all . .		534

The cloisters were 91 feet square.

LONDON. ST. PAUL'S CATHEDRAL.

THE MODERN CHURCH, BUILT BY SIR C. WREN.

Length from east to west . . .	500
——— of the body or nave . . .	200
——— of the dome (diameter) . .	106

		Feet.
Length of the choir		165
——— of the west portico		25
——— of the cross aisles from north to south		248
Breadth of the body and side aisles		107
——— of middle aisle of the choir		42
——— of the west front		180
Height of the vaulting or roof		88
——— of the towers, west front		221
——— from the pavement to the floor of the first interior gallery in the dome	100	
——— from thence to the floor of second gallery	118	
——— third gallery, top of the cone	50	
——— top of the cross	88	
Total		356

N. B. Examined by Gwyn's plan and section.

MAN.

Length from east to west	113
——— of cross aisles from north to south	66
This has no side aisles, the breadth of the body is	22

NORWICH.

	Feet.
Length from east to west . . .	411
——— from west door to the choir . .	230
——— of the choir	165
——— from thence to the entrance into St. Mary's Chapel	36
——— of the cross aisles from north to south	191
Breadth of the body and side aisles . .	71
Height of the great steeple . . .	313

The cloisters are about 170 feet square.

N. B. Corrected by a friend.

OXFORD.

Length from east to west . . .	154
——— of the cross aisles from north to south	102
Breadth of the body and side aisles . .	54
Height of the roof in the western part .	41
——— of the steeple	144

PETERBOROUGH.

Length from east to west . . .	480
——— of the porch	30
——— of the nave to the choir . .	231
Length of the choir	138

	Feet.
Length from thence to the end of the new chapel	80
——— of the cross aisles from north to south	203
Breadth of the body and side aisles	78
——— of the west front	156
Height of the arches to the west front	82
——— of the principal steeple	186
——— of the lantern	150
——— of the roof or vaulting	78

The cloisters were 138 feet by 131.

ROCHESTER.

Length from east to west	306
——— of the nave to the choir	150
——— from thence to the east window	156
——— of the cross aisles from north to south	122
——— of the upper cross aisles	90
Breadth of the body and side aisles	65
Height of the steeple	156

SALISBURY.

Length from east to west	452
——— from the west door to the choir	246
——— of the choir	140
——— from the altar screen to the eastern end, about	65

	Feet.
Length of the great cross aisles from north to south	210
——— of the eastern or smaller cross aisles	145
Breadth of the body and side aisles	76
——— of the transept or great cross aisles	60
Height of the vaulting	84
——— of the tower and steeple, being the highest in England	400
——— of which the steeple is	190

The cloisters 160 feet square.

N. B. Examined by Price's Salisbury Cathedral.

WELLS.

Length from east to west	371
——— from the west door to the choir	191
——— of the choir, about	106
——— of the space behind the choir to the Lady Chapel	22
——— of the Lady Chapel	47
——— of the cross aisles from north to south	135
Breadth of the body and side aisles	67
——— of the Lady Chapel	33
——— of the west front	235
Height of the vaulting	67
——— of the great tower in the middle	160
——— of the towers in the west front	130

WINCHESTER.

	Feet.
Length from east to west	540
——— from entrance to the choir . .	247
——— of the choir	138
——— from altar to Lady Chapel . .	93
——— of Lady Chapel	54
——— of the cross aisles from north to south	208
Breadth of the body and side aisles . .	86
——— of the choir	86
Height of the vaulting	78
——— of the tower, north-west corner .	133

Square of the same, 50 by 48.

Cloisters 179 feet square.

Chapter-house was 90 feet square, having a large pillar in the centre for supporting the vaulted roof.

N. B. Corrected by a friend.

WORCESTER.

Length from east to west	410
——— of the choir	126
——— of the nave	212
——— of the Lady Chapel . . .	68
——— of the cross aisles from north to south	130
——— of the upper cross aisles . .	120

	Feet.
Breadth of the body and side aisles . .	78
——— of the choir	74
Height of the tower to the point of the pinnacles	196

Cloisters 120 feet square.

Chapter-house, a decagon, 58 feet diameter.

N. B. Corrected from Green's Worcester, 4to.

THE COLLEGIATE CHURCH OF WESTMINSTER.

Length from east to west, including Henry VII.'s Chapel	489
——— of the nave	155
——— of the choir	152
——— of the Chapel of Edward the Confessor	50
——— from thence to the entrance of Henry VII.'s Chapel	40
——— of Henry VII.'s Chapel (breadth 66, height 54)	100
——— of the cross aisles from north to south	189
Breadth of the body and side aisles . .	74
Height of the vaulting or roof . . .	101
——— of the towers	199

Cloisters are 135 feet by 141.

Chapter-house, octagon, 58 feet diameter.

N. B. Corrected by a friend.

YORK.

	Feet.
Length from east to west	498
——— from the west door to the choir .	264
——— of the choir	136
——— of the space behind the altar .	26
——— of the Lady Chapel . . .	69
——— of the cross aisles from north to south	222
Breadth of the body and side aisles . .	109
Height of the vaulting in the nave . .	99
——— of the two western towers . .	196
——— of the lantern	213

Chapter-house an octagon, 63 feet diameter.

N. B. Corrected by Drake's York.

EXPLANATION

OF THE

PLATES.

FRONTISPIECE.

THIS curious and very elegant example is given as a specimen of the Saxon or circular style of architecture, and is taken from Mr. Wilkins's accurate print in the 12th volume of the Archæologia. The following is Mr. Wilkins's account of it.

" On the east side of Norwich castle is a tower projecting 14 feet, by 27 in breadth, of a richer style of architecture, which I have ventured to call *Bigod's tower;* it is decidedly of the taste in general use subsequent to the Conquest, and continued through great part of king Stephen's reign; and it was most probably repaired and finished in its present style by Hugh Bigod, who succeeded his brother William in the constableship of the castle early in the twelfth century." Archæologia, vol. xii. p. 162.

Mr. King, in a passage which Mr. Wilkins with great candour has subjoined, considers it as much older. " There is indeed a trace of its having been built in its present form by Roger Bigod, about the time of William Rufus, and of its having been finally completed by Thomas de Brotherton, even so late as

the time of Edward II.; but I cannot help suspecting all this to be a mistake; for, though it may be true with regard to the outworks, and the many great buildings enclosed within the limits and outward walls of this castle, which were formerly very extensive and numerous, that a great part of them were built and completed by those two powerful lords; yet as to the keep, or master tower (the only considerable part now remaining), the style of its architecture is, in many respects, so different from that of the towers erected in the reigns of William Rufus, and Henry I. and II. and the ornaments are so different from those which were in use in the reign of Edward II. (when pointed arches had long been introduced, and were esteemed the most elegant of any), that I cannot but think the building of much greater antiquity, and completely Saxon, though it is possible the staircase might be repaired, or even rebuilt, by Thomas de Brotherton, whose arms are to be seen on a part of the wall. In short, as to the main body of the building, I take it to be the very tower which was erected about the time of king Canute, who, though himself a Dane, yet undoubtedly made use of many Saxon architects, as the far greater number of his subjects were Saxons; and I am rather induced to form this conclusion, because I can find no *authentic* account whatever of the destruction of the castle built in Canute's time, either by war or by accident; or of its being taken down in order to erect the present structure, as is supposed by some." Observations on Ancient Castles. Archæologia, vol. iv. p. 396, 397.

Mr. Wilkins further observes, "The ceiling of this tower is groined with intersecting arches of stone, and its angles are decorated with a very singular kind of hanging billet moulding, projecting ten inches from the ceiling. The first floor of Bigod's tower is a landing from the great staircase, and forms a kind of open portico to the entrance of the building; and a superb entrance it must have been at that time! The piers are enriched with groups of small columns, supporting arches ornamented with archivolts of mouldings enriched with billeting."

PLATE II.

Specimen of the *chevron-work*, or *zig-zag* ornament, in various positions. This is an arched entrance to the north aisle of the nave of Peterborough cathedral, with the plan applied perspectively. Here also are specimens of Saxon capitals.

PLATE III.

VARIOUS ORNAMENTS.

Fig. 1. The *embattled frette*, taken from an arch within the church at Sandwich, Kent; and to be found in most of our ancient cathedrals.

FIG. 2. The *nail head*, taken from arches at Ely.

3. The *triangular frette*, taken from an arch at Ely.

4. The *billeted moulding*, taken from the ruins of Binham priory, Norfolk, built by Peter lord Valoins, nephew to William the Conqueror.

5. The *nebule*. This is taken from an ornamented fascia under the parapet of the north and south sides of Binham priory.

6. Section of the same.

PLATE IV.

VARIOUS ORNAMENTS.

FIG. 1. The *hatched moulding*, used as a string course.

2. A column of *hatched work*, in the upper walk of the north transept of Norwich cathedral: the plan is octagonal, and nine inches diameter.

3. Half the design of a range of curious intersecting arches over the west entrance of the church at Castle Rising in Norfolk. This elegant specimen gives a very good idea of the *corbel table*, if, instead of the pillars and capitals, are substituted the heads of men or animals in the places of the capitals.

FIG. 4. *Saxon intersecting arches,* used to adorn inside walls, &c. The circular vestibule to the Temple church, London, has a curious specimen of this kind.

5. A specimen of *zig-zag* moulding, with a kind of square *billet* moulding, to be found in various old cathedrals. This is taken from a small arch which divides the nave from the chancel at Ely.

6. The billet ornament to a larger scale.

7. One of the arches in perspective in the upper walk in the nave of Norwich cathedral. The window is pointed, consequently of modern date.

This exhibits an elegant specimen of the circular or Saxon style, with the billet moulding; also a spiral band round one of the columns.

PLATE V.

VARIOUS ORNAMENTS.

FIG. 1. Various specimens of the *nebule.* Part of an arch, formerly an entrance on the south side of St. Julian's church in Norwich, probably executed before the Conquest, as the church was founded before that time. It is four feet six inches diameter within.

Fig. 2. This elegant piece represents an assemblage of many ornaments peculiar to the more ancient or Saxon style. In the arch is the cable, the billet, the zig-zag, and again another kind of cable moulding. The capitals are Saxon, and the columns are variously ornamented. This is part of the south entrance to Wimboltsham church, in Norfolk. The columns seven inches diameter.

3, 4, 5, 6. Horizontal mouldings with ornaments, which are to be met with in Herringfleet, Gisleham, and some few other churches in Suffolk.

7. Plan of the east end of the old conventual church at Ely, built in the time of the Heptarchy, A.D. 673, and repaired in king Edgar's reign, A. D. 970. (See page 54.)

PLATE VI.

Two of the piers of the ruined chapel at Orford in Suffolk, with their plans: also the arch mouldings.

" The founder of this chapel and the date of its construction are both forgotten, but, from the style of the chancel, appears to be of great antiquity; it has a double row of thick columns supporting circular arches, their height equal to their circumference, each

measuring about 12 feet. Their surfaces are ornamented in various manners; and what is extraordinary, the opposite ones are not alike; some having a small cylindrical moulding twisting spirally round them; some are crossed lozenge fashion, being reticulated by an embossed net-work; and others, which are square, have small columns at each of their angles." *Grose.*

All the foregoing examples are taken from the 12th volume of the Archæologia, except fig. 1, plate iv. fig. 4, plate v. and fig. 7, plate v. which is taken from Mr. Bentham's plan of the old cathedral church at Ely.

PLATE VII.

The upper part of one of the west towers of York cathedral; which is given as a most elegant example of the modern Norman or florid style. This is copied from Mr. Malton's elegant and accurate print of the west front of York minster.

The following plates, VIII. IX. X. are from drawings made by Mr. Cave of Winchester, the subjects selected and explained by the Rev. Mr. Milner, and are intended to mark the rise and progress of the pointed arch.

REFERENCES TO THE PLATES ILLUSTRATING THE RISE AND PROGRESS OF THE POINTED ARCH.

PLATE VIII.

FIG. 1. Saxon piers and arches in the crypts or subterraneous chapels under the east end of Winchester cathedral. These are demonstratively genuine Saxon workmanship, and prior to the Conquest, having been constructed by bishop St. Ethelwold, and finished in the year 980. The arches are segments of a circle, supporting a plain vaulting, without ribs or other ornaments. The pilasters or piers are square, with two massive columns in the middle of the main crypt, serving as butments to all the arches, with a circular member under a square abacus. The bases are supposed to be buried several feet under the earth, which has been accumulating upon the floor of the crypts during almost three centuries. There are doorways leading from the centre crypt into those of the side aisles, and others at the eastern extremity. In one of these, on the south side, is a well which formerly supplied all the water that was used in divine service.

FIG. A. Is a plan of the crypt.

FIG. 2. A double Saxon or Norman arch, which formed the portal of the ancient sacristy, between the east cloister door and the south transept in Winchester cathedral, being the work of bishop Walkelin, cousin to William the Conqueror, and finished by him in the year 1093. The design and execution of this portal indicate the improved style of the Norman architects, in the loftiness of the arches, the greater regularity of the capitals and bases, together with the ornamental style of the pilasters, which are fluted, and of the arches, which are enriched with the lozenge, the billet, the cheveron, and other mouldings.

3. A specimen of a double arch in the second story of the transept in the same cathedral. In this manner of open work the corresponding second story of the whole church, between the lower and the upper range of windows, was constructed by the Normans, to avoid the nakedness of plain walls, carrying up their work to the height of three stories; whilst the churches of the Saxons for the most part consisted of a single story.

4. Intersecting round arches without pillars or mouldings, by way of ornament to the upper part of the south transept of the

cathedral, on the outside. These being part of the original work, constructed before the year 1093[f], are prior to the first crusade, and afford perhaps the earliest authentic specimen of the pointed arch to be met with in the kingdom.

PLATE IX.

Fig. 1. Intersecting circular arches, supported by Saxon pilasters, both richly ornamented, forming perfect pointed arches. The intersections, which are open through the whole thickness of the wall, constitute the windows, to the number of twenty, which enlighten the chancel in the church of St. Cross, near Winchester. This being the eastern end of the sacred fabric, where the high altar stood, and of course first finished, must have been constructed in the reign of Henry I.[g]

[f] The cathedral and adjoining monastery, which were begun to be rebuilt by Walkelin in 1079, were finished by him and solemnly dedicated in the aforesaid year 1093, three years before the first crusade. (Annales Winton.)

[g] Godwin. de Angl. Præsul. ascribes the construction of St. Cross, by bishop Henry de Blois, to the year 1132; Lowth, in his Life of Wykeham from original papers, to 1136. Probably it was begun in the *former* year and finished in the latter. Henry I. died in 1135.

FIG. 2. Two highly pointed arches, without the appearance of circular intersections, ornamented with zig-zag and other Saxon mouldings, and supported by Saxon pilasters in the south transept of the said church of St. Cross, illustrating the gradations by which the Saxon style was transformed into the pointed or Gothic. This part of the church must have been built soon after the east end.

3. Massive Saxon columns, with capitals and bases in the same style, supporting pointed arches throughout the whole western nave of the same church; by way of further illustrating the aforesaid transformation. It appears that this part of the church also was erected toward the close of the reign of Henry I. [h]

4. The great western portal of the church of St. Cross, being an elegant specimen of the early pointed or Gothic style, in a complete state, as it prevailed in the reign of king John [i], and the early part of that of Henry III. It consists of a double arch with trefoil heads, and an open qua-

[h] What is here said applies only to the lower story of the church. The windows of the upper part, together with the groining of the nave, and the west window and door, bear demonstrative proofs of alterations subsequent to that period.

[i] Witness the cloisters and refectory of Beaulieu abbey in the New forest erected by that monarch, and bishop De Lucy's works in Winchester cathedral.

trefoil in the centre above them, forming all together one elegant pointed arch, which rests upon four slender columns, with neat plain capitals and bases. The arched moulding that rests upon the inward pillars, consisting of the cup of a flower inverted, in open carved work, is an appropriate ornament of the pointed order, being different from every kind of Saxon moulding. We have here also one of the first specimens of a canopy over a pointed arch, which afterwards became so important a member in this style of architecture. The present canopy is a plain weather moulding, of the same angle with the arch itself, and rests, by way of corbels, on two flowers, instead of human heads, though an ornament of the latter kind is seen in the open space, just above the centre column. It may be looked upon as certain, that this ornamented portal is not coeval with the rest of the lower part of the church; and from its style we may safely pronounce that it was altered to its present form about the beginning of the thirteenth century.

Fig. 5. The great west window of the same church, being divided by simple mullions into five principal lights, the wheel above and other intermediate spaces being filled with ornamental trefoils. This appears to be one

of the earliest specimens of a great west window, before transoms and ramified mullions were introduced; and therefore the western end of the church must have been altered to receive this and the door beneath it about the time above mentioned; the eastern extremity of the church being left (as it still continues) in its original state [k]. There is a plain canopy, without any appearance of a pediment, over the arch of this window, like that over the portal. The chief improvement is, that it rests, in the present instance, on corbel heads; namely, those of a king and a bishop.

PLATE X.

Fig. 1. Clusters of slender insulated columns of Purbeck marble, with plain neat capitals and bases, supporting long lancet-fashioned windows; such as began to be in use at the latter end of the twelfth century, and occur both on the outside and the inside of bishop De Lucy's work at the eastern end of Winchester cathedral.

[k] Bentham, whose authority is unquestionably the greatest amongst those who have treated of these subjects, says, that "great eastern and western windows became fashionable about the latter end of the reign of Edward I. and in that of Edward II." (p. 83, 84): he does not, however, by this deny that such comparatively plain western windows as this of St. Cross might have been made in the reign of Henry III.

FIG. 2. A cinquefoil arch, supported by short Purbeck columns, over an altar tomb in the northern aisle of the church of St. Cross, which, by different signs, appears to have been erected about the middle of the thirteenth century. The canopy, though it does not rise to a pediment, is adorned with crockets and a finial.

3. The tabernacle containing the statue of bishop William of Wykeham, in the middle tower of St. Mary's college, Winchester. The canopy, ornamented with elegant mouldings and crockets, branches out from side buttresses, and forms a pediment which terminates in a pinnacle[1]. Other pinnacles crown the two buttresses themselves. The inside of the canopy is vaulted with tracery work, which springs from columns that rest on corbels. This tabernacle was

[1] The present canopy, though of a moderate height, is low compared with those which had prevailed during the preceding century, when they proceeded in straight lines from the side buttresses, until they converged in a lofty pinnacle of the acutest angle, such as is seen at Westminster abbey, in the monuments of Edmund Crouchback, who died in 1296, and of John of Eltham, who died in 1334; also in the stall-work of Winchester cathedral. During the latter part of the reign of Edward III. the canopies began to be reduced in their height, by being curved towards the arches which they covered, as may be seen on the monuments of queen Philippa, who died in 1399, of Edward himself, who departed this life in 1377, of Sir Bernard Brocas, executed in 1399, all of which are in Westminster abbey; likewise in the chantry of Wykeham at Winchester, and generally in all canopies constructed after the period above assigned.

probably constructed by the founder himself in his lifetime, near the close of the fourteenth century.

Fig. 4. A portion of the gorgeous fretwork in the upper story of the altar screen of Winchester cathedral, consisting of columns, buttresses, pinnacles, niches, tabernacles, canopies, tracery work, groining, pendents, fascias, finials, &c. all of the richest design and most exquisite workmanship, constituting the *ne plus ultra* of ornament in miniature, belonging to the pointed order. The screen was finished by bishop Fox in 1525.

PLATE XI.

An interior view of Durham Cathedral, looking towards the east, in the nave. Here, in broad character, is shewn the true Saxon style, round massive columns, with circular arches springing from them; the ornaments, the bold torus, the simple billet, the wavy cheveron, are in true character with the style and antiquity of the surrounding parts. The massiveness of the composition produces a grandeur of effect in this view, which impresses on the mind awe, reverence, and wonder.

PLATE XII.

An interior view of Westminster Abbey, looking towards the principal or western entrance. The elegant lightness of the pointed arch is here conspicuous; slender columns, whose bulk is further concealed by surrounding small columns or barrels, here meet the eye: from these spring highly-pointed arches, destined to carry the incumbent weight, which is much and judiciously relieved by the spacious openings over the intervals, which are ornamented with light and elegant mouldings; the barrels rising from the capitals of the columns, break and ornament the spaces between the spandrels, and thence ascending to the roof, are lost in the spreading groins of the vaulting. Here also is seen the magnificence of the great western window.

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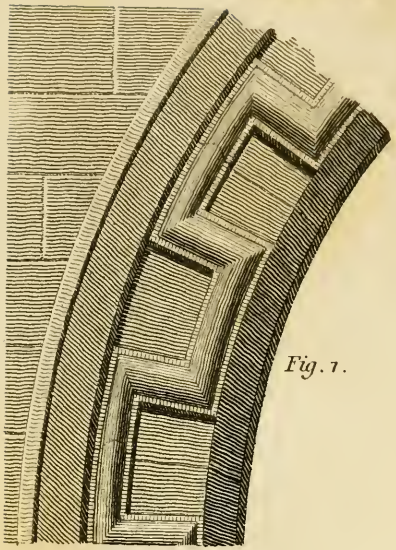
North Entrance to Peterborough Cathedral.

Various Ornaments.



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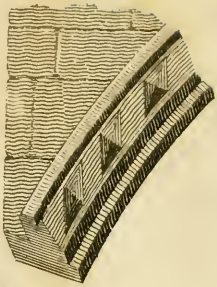

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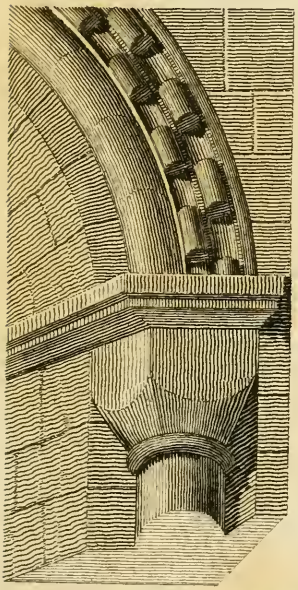

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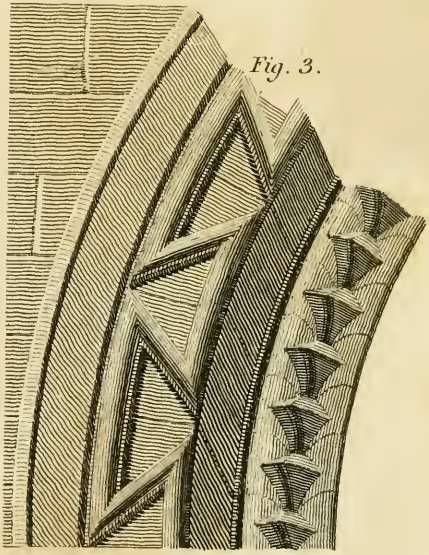

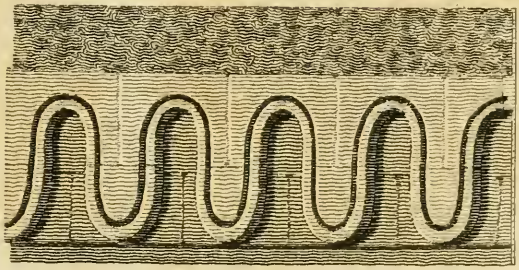

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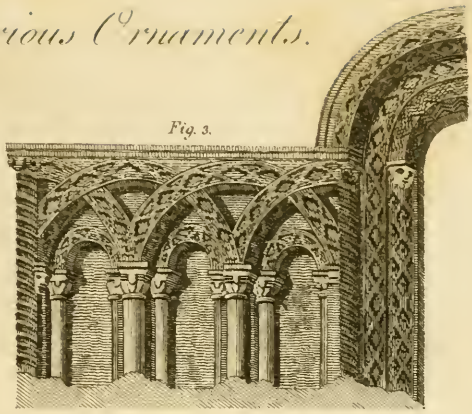

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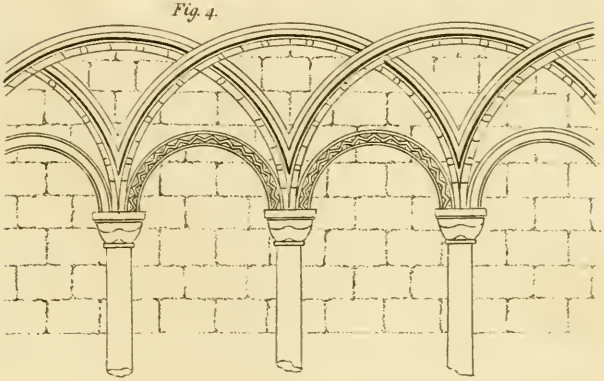

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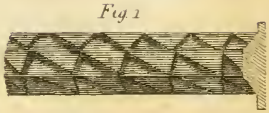

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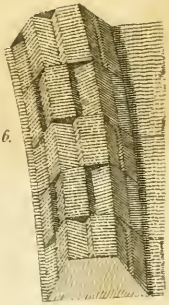

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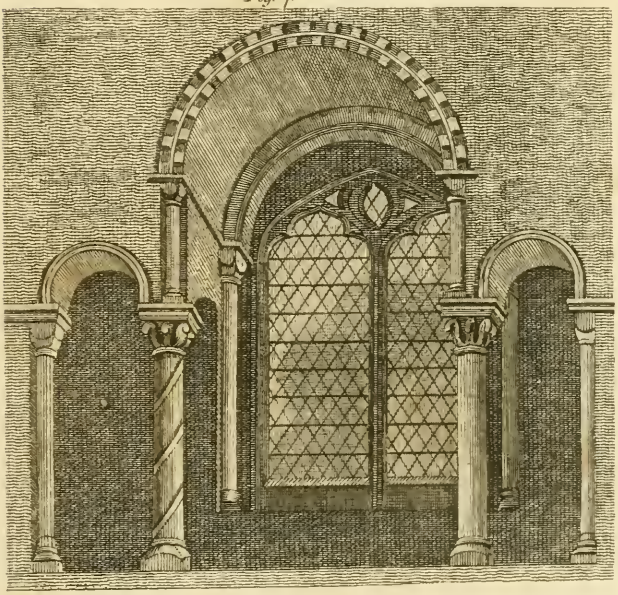

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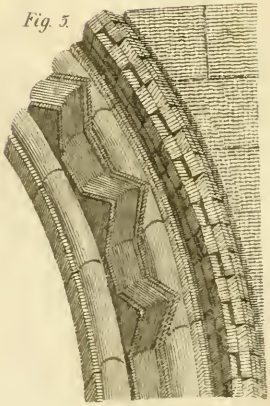

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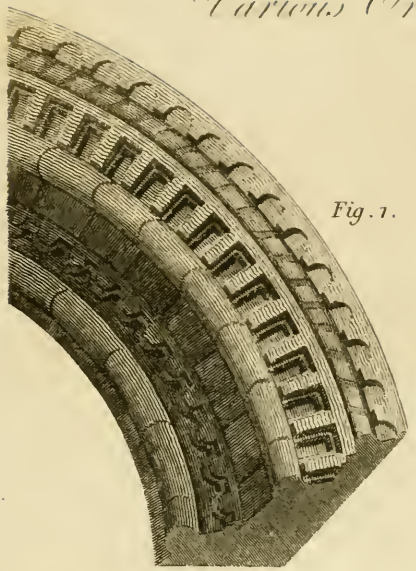

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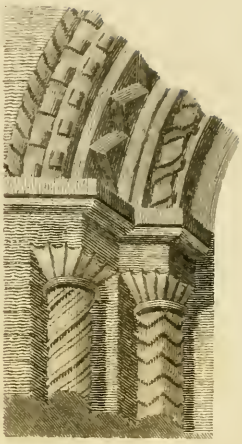

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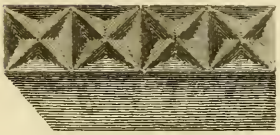

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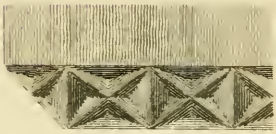

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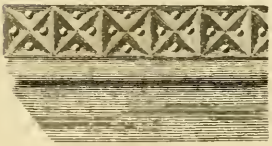
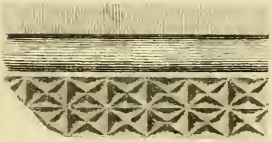


Fig. 5.



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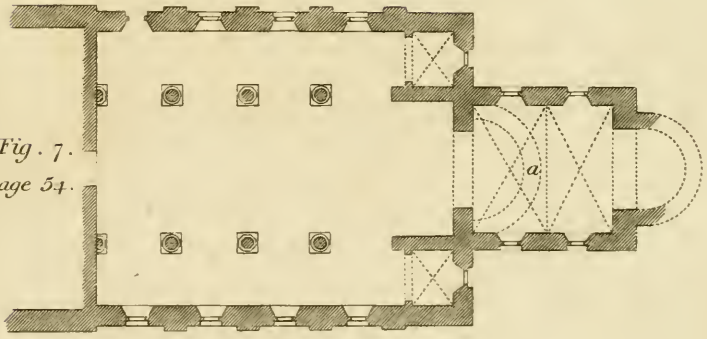

Fig. 7.
page 54.

3 10 20 30 40 50 60 70 Scale to the Plan.

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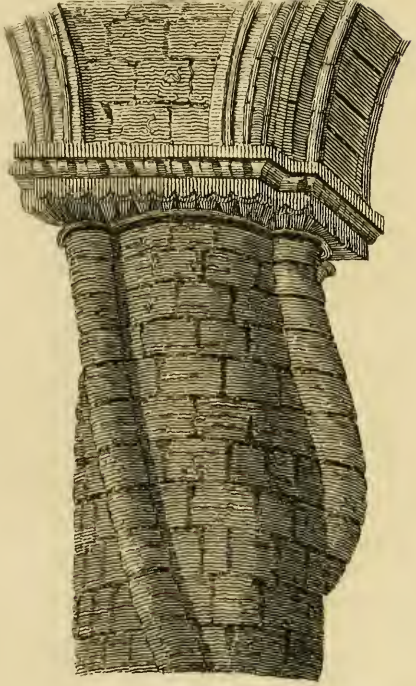
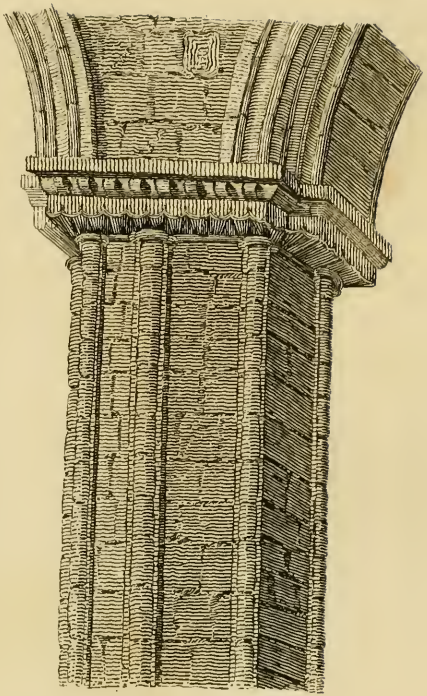


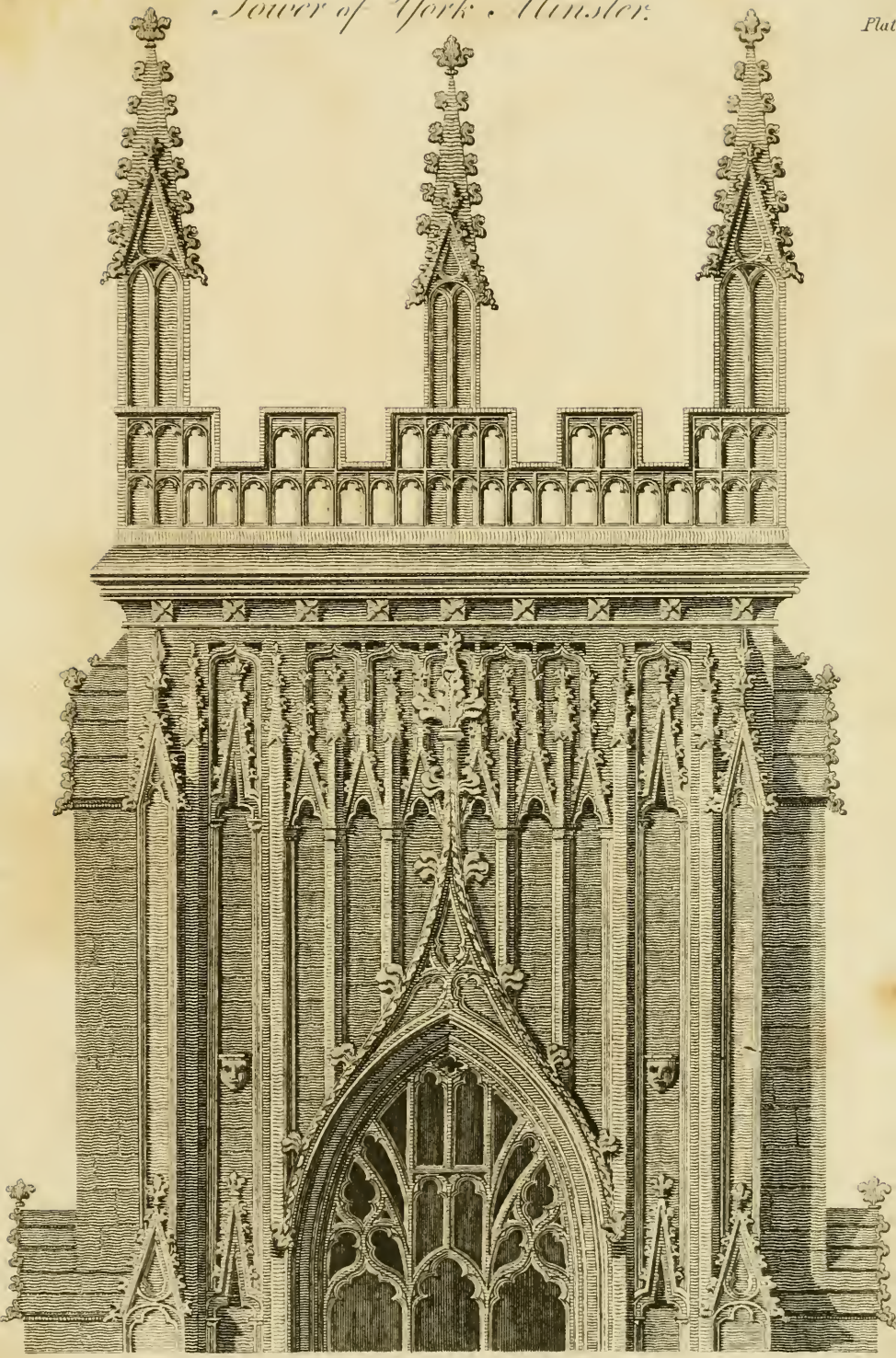
Plan



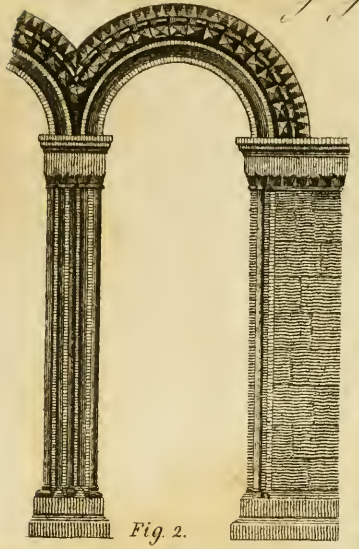
Plan

Tower of York Minster.

Plat



Rise and Progress of the Pointed Arch.



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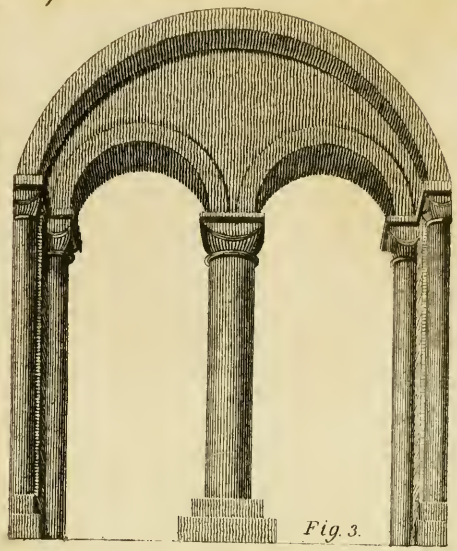

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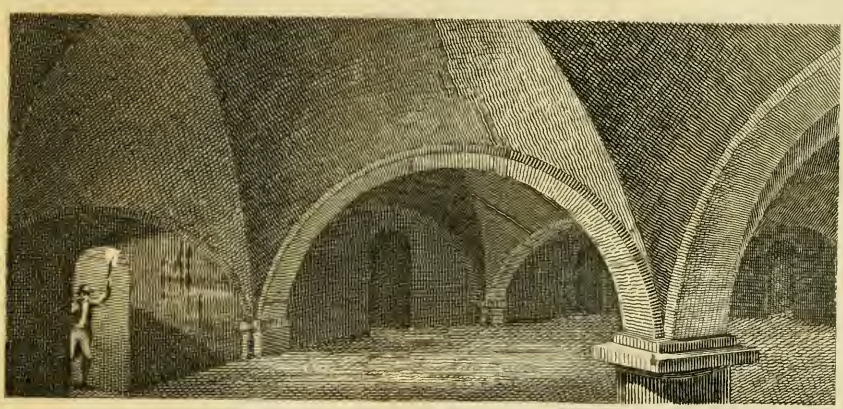


Fig. A.

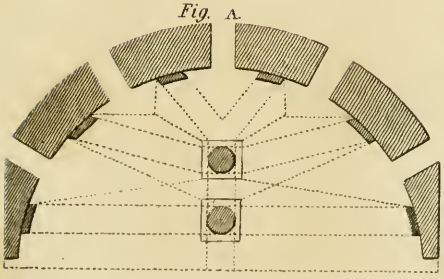
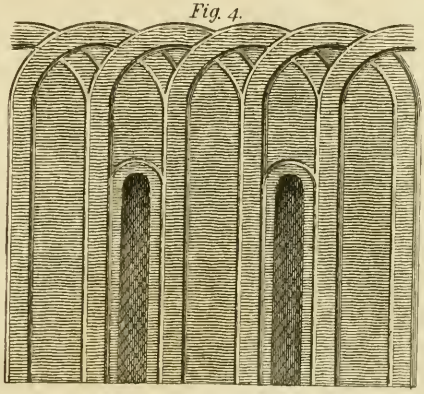


Fig. 4.



Rise and Progress of the Pointed Arch.

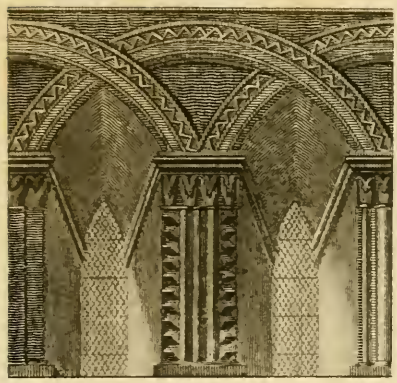
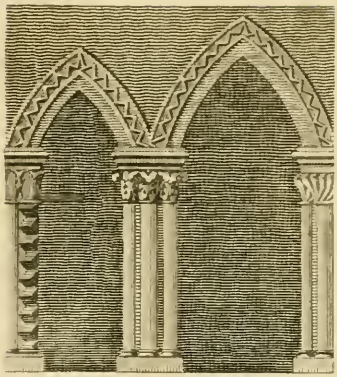


Fig. 1.



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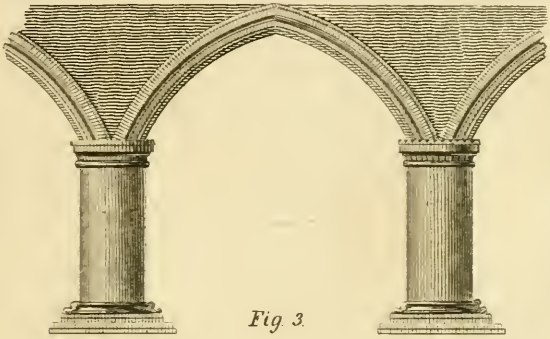
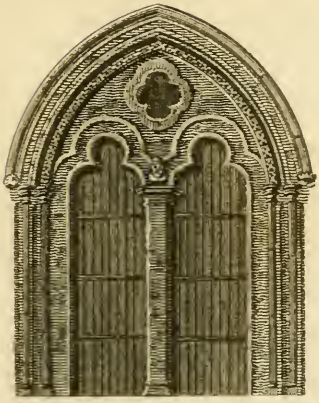


Fig. 3.



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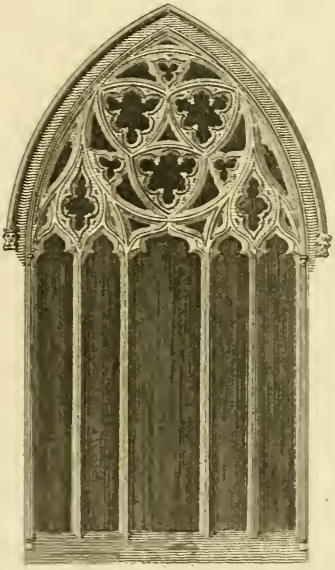

Fig. 5.

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Rise and Progress of the Pointed Arch.

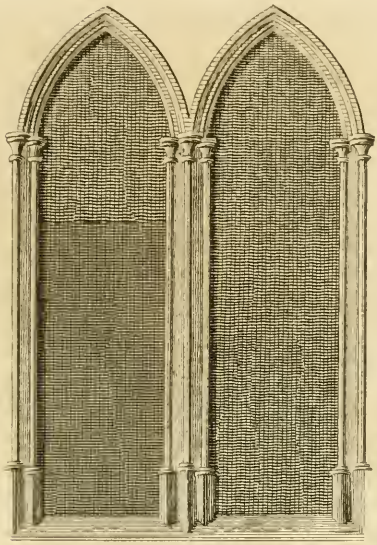


Fig. 1.

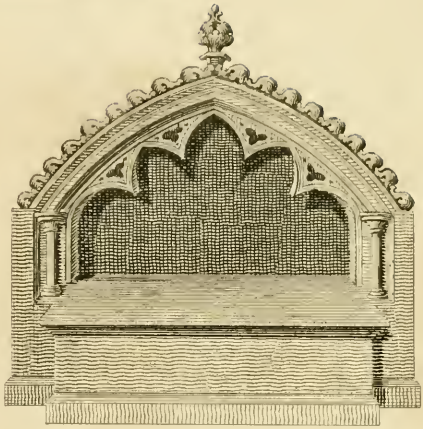


Fig. 2.

Fig. 3.

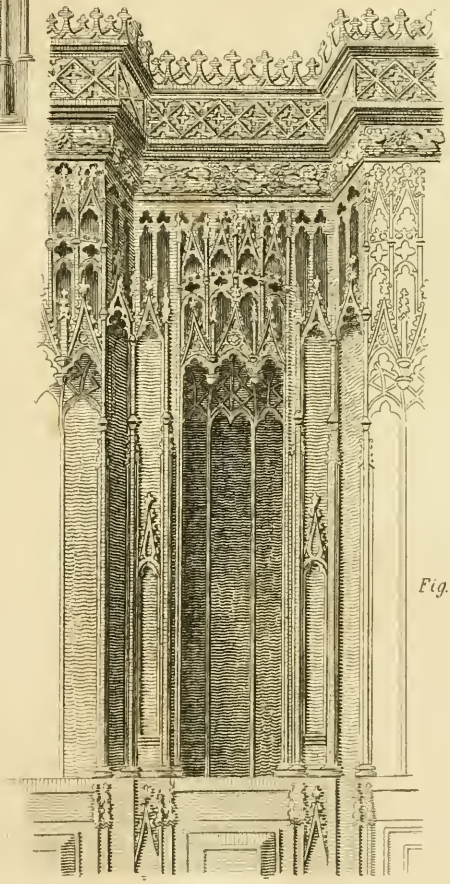
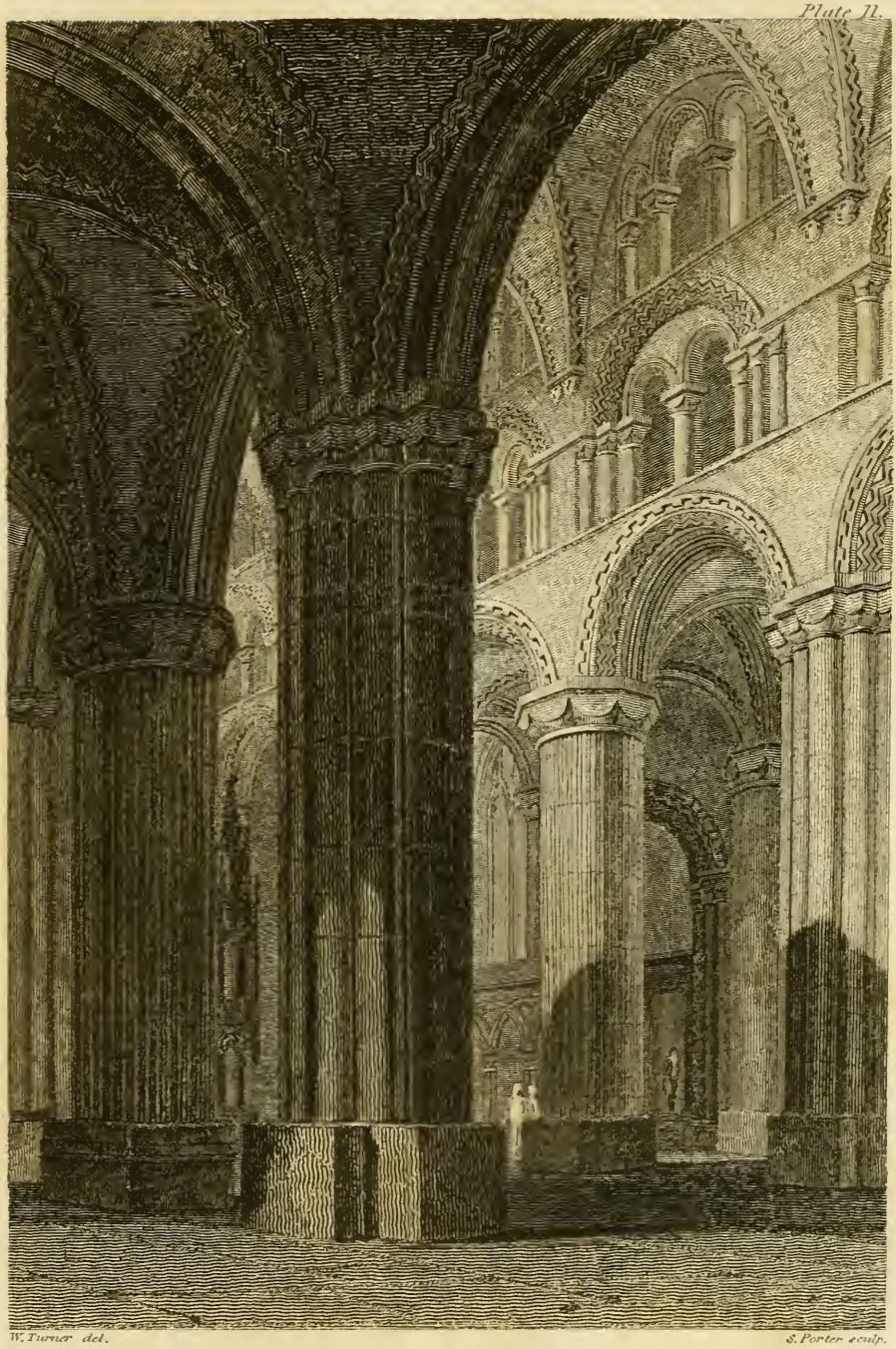


Fig. 4.

Durham Cathedral.

Plate II.

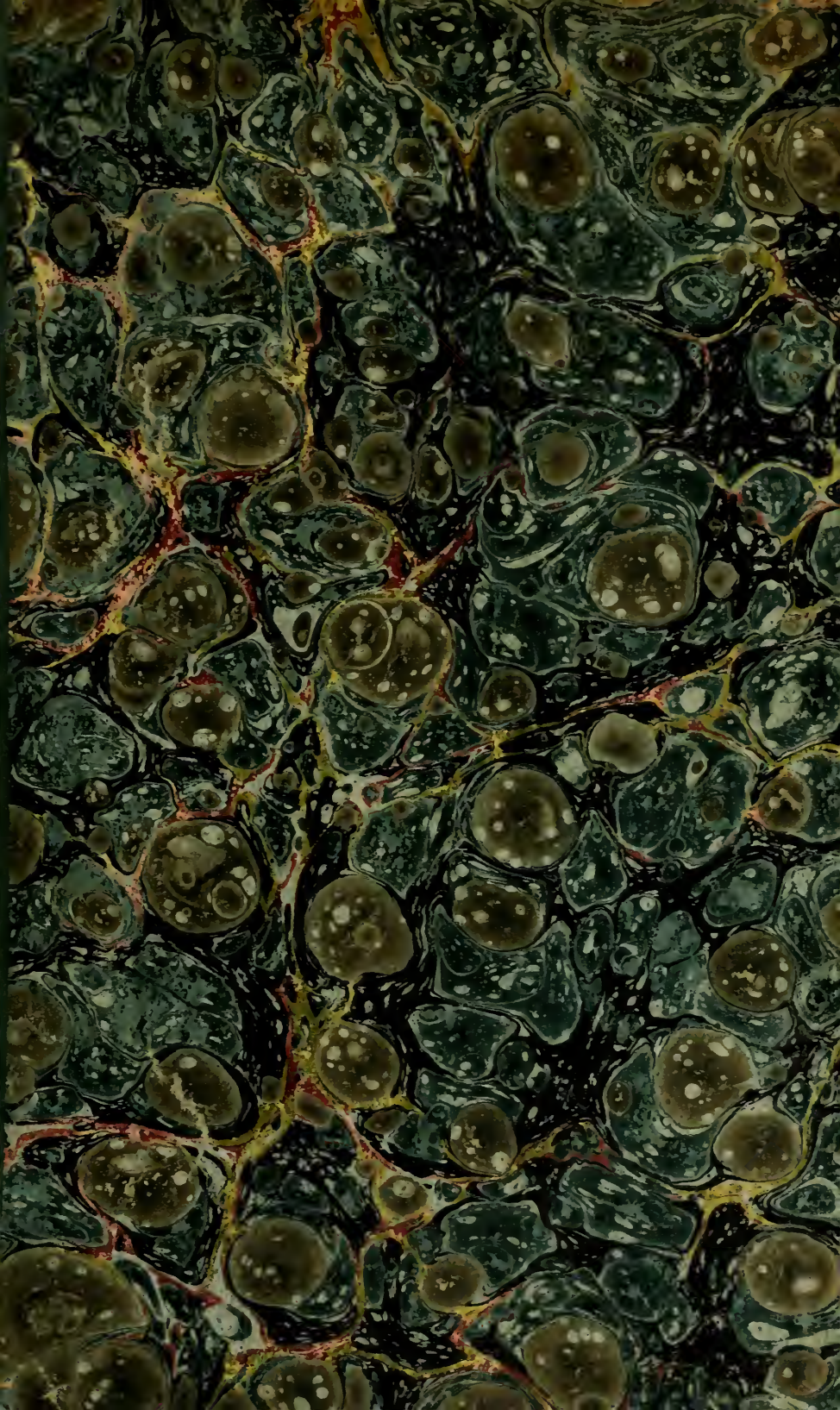


W. Turner del.

S. Porter sculp.

Westminster Abbey.

Plate 72.

J. C. Barrow del.

W. Cooke sculp.